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TROPHIES OF WAR

A

STAR BOOK

HEAD HUNTERS OF THE AMAZON

SEVEN YEARS OF
EXPLORATION AND ADVENTURE

BY

F. W. UP DE GRAFF

With a Foreword by

KERMIT ROOSEVELT

ILLUSTRATED

GARDEN CITY PUBLISHING CO., INC.

GARDEN CITY, NEW YORK

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Printed in U. S. A.

TO MY SONS

BOB, BILL AND FUZZ

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FOREWORD

It is not given to many of us to wander through the waste places of the earth, and too often the explorer leaves no written record of his experiences. Mr. Up de Graff led an adventurous life in the region drained by the extreme head waters of the Amazon, and he was a keen observer of all that passed on around him. As he says, he is not a trained naturalist and the deductions he draws from some of his observations may be questioned by men whose life work is natural history, but any such criticisms do not detract from the value of the work. Anyone who has tried it out knows that three equally reliable men observing together a scene or incident, combining variety of action with rapidity of duration may make greatly varying independent reports of what took place.

To him who knows life in the Amazon jungles Mr. Up de Graff's narrative will bring back many a vivid scene. The layman may feel that he overemphasizes the hardships, but those who have been off the beaten path in the tropics will known that such is not the case. The only one of Mr. Up de Graff's companions whom I have met talked of this very matter of temperament. He said that when he looked back upon his life on the upper Amazon he remembered only the excitement, the interest and the glamour; but that when he came to really think it over of course he could recall very clearly the reverse of the medal. I must confess to somewhat the same tendency.

Mr. Up de Graff emphasizes the discomforts of the ant plague; and it was that which we found most disagreeable on the River of Doubt. One is apt to think of the Ama-

zon basin in terms of snakes and mosquitoes, and I was interested in seeing that Mr. Up de Graff made the same observation that we did, and remarks that very few snakes are really to be encountered in the unsettled and unexplored territories. They do far more damage in the settled districts. The loss of life from snake bite is large in Brazil, for the field laborers go barefoot, and are therefore very vulnerable. Dr. Vital Brazil has done much to combat this mortality in developing serums on his snake farm in Saõ Paulo.

One point on which my own experiences are at variance from those of Mr. Up de Graff was in the maximum length reached in an anaconda. I have often heard tell of snakes forty or fifty feet long but I have never encountered one, nor seen the skin of one. Many of our companions in Brazil told of meeting with snakes of great size, and when my Father offered five thousand dollars reward for the skin and vertebra (or either alone) of a snake of more than thirty feet, our comrades considered the money as good as in their pockets, for Father set no time limit on the offer and only required that the specimen be turned over to the nearest American Consul, who would then forward it to him. That snake is still at large! There may be snakes of more than thirty feet, no one can definitely deny their existence, but they must be exceedingly rare.

I have said it is easy for entirely trustworthy observers to make mistakes. How easy it is was once demonstrated to Father and myself in East Africa. There was a persistent legend of the existence of a giant water serpent in Lake Naivasha, and one day when we were out after hippopotamus I pointed out to Father something that certainly had every appearance of being a great snake swimming through the water. Had we not had field glasses we would probably in all sincerity have be-

lieved that we had seen the legendary serpent, but when we turned our powerful glasses upon the snake it proved to be a school of otters slipping along in single file. Since then I have been slow to discredit the sincerity of those recounting the most unusual sights.

Mr. Up de Graff's book should commend itself to a great variety of readers. Those in search of adventure can read it as they would a novel; those in search of a vivid picture of a great unknown stretch of country can learn a vast amount in a most attractive form. It is useless to attempt to record the numberless incidents that will stand out with photographic sharpness to those who know the jungle. How excellent is the description of the feeling of oppression brought on by being continually encompassed by the tall trees, with only an occasional slit of sky visible and never an horizon. Too few of the genuine "voor treckers" have left us an account of their experiences. We owe a great debt to Mr. Up de Graff.

KERMIT ROOSEVELT

INTRODUCTION

THIS is an old story, and yet a new one. Since the race of men first began to move over the face of the Earth, the desire for fresh discovery has been strong in the human breast. This longing to penetrate the hidden depths of Nature, coupled with the sheer love of adventure for adventure's sake, was perhaps what drove me to undertake the series of journeys of which this book forms a simple tale. I claim for it neither scientific nor literary value. It is a mere collection of disjointed records, published in this form in the belief that the youthful, untamed spirits of to-day will derive pleasure from the contemplation of the wanderings of one of their predecessors, guided by an inscrutable Fate.

After twenty years of pressure from my friends, and several false starts, I have at last succeeded in putting on record the story of my wanderings in the little-known forests of the Upper Amazon basin. There, in the greatest tract of virgin country in the world, I spent some of the most fascinating—as well as the most wretched—days of my life, in the company of as fine a set of fellows as a man could wish for at such a time. Fortune threw us in each other's way, but before we parted we were bound by insoluble ties of friendship.

As for their identities, I have concealed none but one—the man whom I have called Morse. Not only their names, but every detail mentioned in connection with the characters who figure in this book is accurate. It is a History, in the true sense of the word, for I have fulfilled to the letter the first duty of the historian—I have told the truth.

In all probability many of my friends and acquaintances of whom I make mention are alive to-day. Nothing would give me more pleasure than to hear from either themselves or others who know something of their more recent histories, should this book fall into their hands.

The problem of putting into writing an unwritten language is bound to present certain difficulties. These I have met in what appeared to me to be the most practical way in the case of the *Inca* (or *Quichua,* which is the Ecuadorian equivalent) and *Jívaro* words, which I have introduced for the sake of those who are interested in philology. In order to convey as nearly as possible the exact sound of such words, I have spelled them in accordance with the Castillian pronunciation of the alphabet, which certainly renders them much more accurately than would the English one with its numerous anomalies and variations. Those who take pleasure in studying such matters should note the few important points of distinction between the Spanish and English alphabets before reading the text.

To my friend and collaborator, Roger Bacon, I give the credit for the careful compilation of the complex data which form the basis of this story, and take this opportunity of thanking him for his energetic and painstaking assistance in putting the whole thing before the public in readable form.

Greater still is the debt which I owe to my mother, who has carefully preserved for me the numerous documents bearing on this narrative, which have enabled me accurately to record many details which would otherwise have escaped my memory.

F. W. Up de Graff.

Barcelona, 1921.

HEAD HUNTERS OF THE AMAZON

CHAPTER I

THE BEGINNING OF THE TRAIL

The Call—The "Theta Nu Epsilon"—Colon—The Grand Hotel, Panama—Guayaquil—Alligators—An appointment.

I HAD made the acquaintance of D. Enrique Domingo Cordovez, known among his friends as "the Count," at Union College, Schenectady, N. Y., in the year 1890. He was one among the many rich young South Americans who come to the United States to take advanced courses at the universities, chiefly in the field of engineering. The son of a wealthy Ecuadorian, he was actuated by a very real desire to return to his native land equipped with the technical knowledge which would enable him to install in its primitive towns some of the many modern conveniences which were sadly lacking. And so it came about that his serious nature and his real love of his work enabled him to graduate with honours as a civil engineer.

My activities as one of the chiefs of the "Theta Nu Epsilon" led to my "graduating" two years ahead of my class. Well do I remember how the whole of my classmates hauled me down to the station in the College farm wagon on the day of my departure, having refused to work on so memorable an occasion. But although the "Count" did not graduate at the same time as I did, our two years together as members of the same fraternity had sufficed to form a lasting friendship between us. Furthermore, the long descriptions of the backwardness of his country which he had given me from time to time, had fired me with a determination to go there

one day and equip the City of Quito with some much-needed modern improvements. In those days, the streets of the capital of Ecuador were lighted by means of candles placed by householders in their front windows.

So I kept in touch with Cordovez after I left College, and later he came to see me at my house in Elmira, N. Y. There we finally decided that I would go down to Ecuador as soon as he had had a chance of examining the business possibilities of our proposed ventures, for which he was to find the money and obtain the concessions on arrival home. Then he left the States.

Thus it came about that in October, 1894, I received the following letter asking me to confirm our agreement.

Quito.
September 30th.
1894.

Mr. Fritz W. Up de Graff.
Elmira, N. Y.

My dear Fritz,

You cannot imagine how glad I was to receive your letter. As I was in Riobamba at the time it had reached this place, it did not come to my hands but some days after.

Well, you are an electrical engineer now, are you? I thought you still were engaged in the canning business over in Chicago, so I must confess I was surprised when I read your letter proposing all sorts of electrical business. . . .,

Now I must let you know that life in the forests is not very enjoyable and has a number of unpleasant things that are in connection with it. No society is to be found there, no such amusements as shows and the like either, and one can only be there to work, and if one is enterprising and hard-working it is a sure thing to get a good remuneration after a time.

This country is composed of very indolent people, and I can assure you that though there are no possibilities of making the fabulous fortunes that are made in the States, yet it is much easier here than there to make a handsome capital. The country is backward, very backward, and there is an opening in almost every line. As I told you when in the States, the climate of the interior is extremely pleasant and healthy, whilst that of Guayaquil is unhealthy to most people, however I have been in perfect health in both. . . .

It is now your turn to decide. If you decide to come, it is better to do so immediately, before Winter begins. Let me know at once the date of your arrival in Guayaquil, and I will arrange so that you will have no difficulties when you get there.

Hoping that I will see you soon, and that this finds you now in perfect health,

I remain, yours in the bonds,
H. Domingo Cordovez.

It did not take me long to come to a decision. Stanley's "Through the Dark Continent" had inspired me as a boy with a determination to go off into the Unknown World which lies beyond the confines of civilization, offering a life brimful of adventure to him who would penetrate its depths. Adventure! That was the keynote of my life, the note to which my youthful, untamed spirit vibrated in sympathy. Here was my chance, then. To South America, with its vast tracts of unexplored territory, holding Heaven knows what strange secrets, I would go.

On November 18th, 1894, I sailed from New York in the *S.S. Advance,* of the old Ward Line, bound for Panama, via Colon, with $100 in my pocket. In ten days we made the Colombian port, after a voyage which was, I suppose, as uneventful as any other, but which was, for me, a great adventure. I was on my way to my goal.

Colon struck me as being a town of turkey-buzzards and niggers. Both turned out in large numbers to watch the arrival of the *S.S. Advance.* I had not much of a chance to see the town, a mere collection of thatched roofs grouped round the wooden wharves, half-hidden by the palms and banana plants which grow in profusion. Situated in the middle of a swamp, with muddy lanes for streets, and buzzards in place of sewers, it was a wholly unattractive place.

I boarded a train on the landing-pier, and was taken

across the Isthmus in about two and a half hours, passing a series of small country towns much the same as Colon itself, and having frequent glimpses of the old De Lesseps Canal. The abandoned machinery still lay where it had been left by the French, rotting in the mud and water, tropical growth sprouting from the stacks of the steam-shovels, their great boilers half hidden in the tangled mass of rank weeds. It was a dismal spectacle.

Arrived at Panama, I wrote home on December 12th, 1894, from the Grand Hotel, the only one the town boasted. It described itself on its letter paper as "Situated in the Parque de Santa Ana, the most central point of the city, and at the same time the healthiest; a first-class restaurant; splendid bedrooms for travellers and transients; cup-and-ball room."

In reality, dirt, bugs, and an absolute disregard for the decencies of life as we understand them were the outstanding features of that hotel. The sanitary arrangements were primitive in the extreme. The "splendid bedrooms" to which the letter-paper gave witness were so teeming with vermin that no proper impression of the state of things can be conveyed. I was not aware at the time whether it was the custom to mow the grass and weeds before showing a guest to his room, but at any rate the proprietor of that hotel neglected to do so. The verdure was growing between the floor-boards to the height of at least a foot when I took possession of my room. I did a little weeding before bringing in my steamer trunk, and depositing it in the clearing which I had made, that night I slept on it, escaping the crawling creatures which lived in the bed, and which would have had to risk being lost in the forest on the floor in order to reach me. The mosquitoes, however, were appalling.

Mr. Soresby, the American consul, was very kind to me, and gave me a good deal of friendly advice for which I was very grateful. Many were the traps awaiting the young, unwary traveller from the North. On my second evening in the town, he took me out to see the places of amusement, demonstrating among other things his skill at the wheel of fortune. In a very few minutes he broke the bank for twenty thousand Colombian *pesos*. To the proprietor, who came and begged him to lend him half the money to re-start the wheel, he put a leading question:

"Would you," he asked, "have given me back half my money if I had lost a fortune to you?"

Next day I was glad enough to board the *S.S. Santiago* of the Pacific Mail Line, and see the last of Panama as we sailed for Guayaquil. After forty-eight hours' sailing, we arrived at our destination.

There were two outstanding features of the chief port of Ecuador which, I think, deserve mention; the sewage system, and the "Admiral." Mr. Dillard, the American consul, described to me the former as I was not staying long enough in the town to see it for myself, due to the prevalence of yellow fever and bubonic plague, and introduced me to the latter.

The refuse of all kinds, instead of being carried away in drains, was thrown out of the upper windows of the houses on to the roofs of passing tram-cars which were surrounded by a special boarding a foot high. A fair proportion hit its mark. When the car arrived at the outskirts of the town, the deck-cargo was dumped by the conductor. A leak in the roof of one of those cars must have been a serious matter. This system must be unique in all the world.

We met the "Admiral" in a tavern, from which he had just ejected everyone else with the aid of a table-leg

which he still grasped when we entered. His name was Brown, and he was from Pittsburg. He was the navigating officer, chief gunner, and engineer of the Ecuadorian fleet, which was lying at that moment under repair in the harbour of Guayaquil. The fleet was composed of a couple of gun-boats, known to the English-speaking residents as the *Espere un poco* and the *Pasada mañana.*

From Guayaquil I went up the Guayas, a tidal river, to Bodegas, the greatest cacao-collecting station in the world. It lies about eighty miles from the port of Guayaquil. Never have I seen such enormous numbers of alligators as those which lived along that river. The water seemed to be composed of mud and alligators. The mud-bars were almost eclipsed by them. We ran over them and into them all the time.

Thus it happened that just two and a half years from the day on which I had been driven in state to Schenectady station, I was met by my friend Cordovez on the wharf of Bodegas.

And so began my seven years wanderings in South America.

CHAPTER II

A LAND OF OPPORTUNITY

Mules—*Cacao*—La Delicia—My first trail—Rum—A first-class road—The Córdovez Family—Easy money—Salinas—Chimborazo—A window-dresser—An industrial revolution—I retire from business.

In Ecuador, from the Andes to the Pacific, the greater part of the non-inundated land is under *cacao*, from which, as all the world knows, three-quarters of the world's supply of chocolate and cocoa is manufactured. Indeed, it may be said that this plant is produced in Ecuador almost to the exclusion of anything else. On the Western slopes of the Andes, however, grows a high-grade coffee, second only in importance to *cacao*. Sugar cane, too, is cultivated to a great extent on the same slopes, from which is made more *aguardiente* (rum) than sugar.

It was through the endless *cacao* plantations between Bodegas and La Delicia that Córdovez took me by private trails on mule-back. He came to Bodegas ready supplied with the two best saddle-mules in the country, reared on his family's ranches, which were considered to be the foremost in Ecuador. They were gaited animals, with a fast jog-walk and a fine single-foot, small and well-proportioned, with tapering legs and small feet. They took to the water like ducks and swam with us in the saddle, they crossed rivers on single slippery logs without turning a hair, and they jumped ditches and fallen trees which lay across the trail. Unlike a horse, they would have gone for a day on a straw hat and a saddle blanket if hard-pressed for food. As saddle-animals they

were even more comfortable to ride than horses, especially on a bad trail. In really rough country, the stamina of such beasts as these exceeds that of a horse many times. Indeed, when it is a question of more than two days' journey the latter cannot be used at all, unless a change of animal is possible. Moreover, the spirit of a mule is always inferior to that of a horse, which, for practical purposes, is an advantage, for while the mule will not go beyond its endurance, the latter will go till he drops and leaves his rider helpless. However, the outstanding feature of a mule is always stubbornness, however fine an animal he may be, and if he takes it into his head to stop he will, and the only way to get him past the spot at which he has shied, is to take a half-hitch with your rope round his tender upper lip, pass the end of the rope around a tree a few yards ahead, walk back with the end of the rope behind the mule, and prod him with a stick. Every time he jumps, take up the slack.

After one memorable night in a hotel in Bodegas under conditions compared with which those in Panama smacked of Heaven, our little cavalcade set out on the long journey for the Córdovez plantations. The "Count," myself and one muleteer were all there were. I had left my kit in Bodegas, except what I could carry on the saddle, having made arrangements for it to be forwarded to Riobamba by the main and only road from the coast to Quito.

For the first three days we passed through nothing but *cacao*. Anybody who has seen the olive-bearing districts of Andalusia in the south of Spain will need no description of what those endless rows of bushy-topped trees are like, stretching away like a giant's quilt as far as the eye can see. As in the case of the olives, nothing is planted between the rows, and no limbs spring from the first few feet of trunk. Their tops almost

join in one great roof. But the fruit of the *cacao* grows in a curious way. The seed-pods project straight from the trunk and the larger limbs, instead of from the small branches. Each pod (*mazorca* in *Ecuadorian Spanish*) contains eighty to a hundred seeds, or beans, as they are known commercially. Their appearance is too well known to require description.

At night we would stop at some overseer's cottage. Everywhere the name Córdovez gave us an easy entry, and I began to be somewhat impressed by our importance. In point of fact the family did occupy a position of importance in the country. They owned large cattle and horse ranches, as well as eight hundred square miles of uncleared forest, suitable for the planting of any of the three principal crops of Ecuador. Many Indian villages were situated within the confines of their territory, from which they drew their supply of peons (workmen) for the plantations and ranches scattered throughout their property. Politically, as happens in all the Republics of Latin America, their power rose and fell with the certainty of a thermometer in strict accordance with the changes of administration. When I arrived in the country it happened that an administration favourable to their interests had just fallen, and, until the necessary "influence" could be brought to bear once more, their power would be on the wane. I went into Ecuador on the invitation of my friend the "Count," expecting to find all sorts of commercial possibilities opened up by reason of the standing of his family, and their intelligent grasp of the country's needs and, when I first arrived I was not disappointed.

It is a wonderful experience to ride through the *cacao* country at night. Everywhere swarm gigantic fire-flies as big as June-bugs; they carry two greenish-yellow headlights which are always burning as well as the usual

intermittent light under the body. It is as if the insect world were holding a great fête throughout the plantations.

Once clear of the *cacao* district, we started to climb through the forest, having set foot on the first slope of the Andes. The monotony of the flat *littoral,* the strip of country lying between the Pacific and the Andes, was broken at last, and it was there that the mules demonstrated their superiority as saddle-animals.

Arrived at La Delicia, after passing over the scarcely used trail which ran up through some of the undeveloped Córdovez holdings, with the boy riding ahead to cut away the brush which had overgrown the trail since last it was used, we called a halt. La Delicia was the headquarters of Don Agosto Córdovez, famous for his picturesque cursing of the peons, one of the six or seven sons of the old man who managed for their father the various plantations and ranches on the vast estate. There we stopped for a delightful week or ten days to rest our mules, and for me to be introduced to forest and plantation life. It was my first experience of anything of the kind, so the novelty of even the most ordinary events of every-day life in such places appealed to me very strongly, as it would to any person with a love of outdoor life. I went hunting monkeys, turkeys, wild pigs, parrots, deer and jaguars, none of which I had ever shot before. The monkeys in particular, I remember, excited my enthusiasm, never having seen them outside a cage before. As novel as the hunting was the eating of many of these strange forest-dwellers. The impression my first taste of monkey made on me stands out clear in my memory. The gastronomical possibilities of a baboon probably occur to only a very few of the millions who gaze at him through iron bars.

I was introduced, too, to the arts of tapping rubber

trees, making rum and sugar, collecting *plátanos* and *yuca* (bananas and arrowroot are the staple foods in the hot country of Ecuador), and blazing forest trails. Generally when out hunting I was accompanied by an Indian, but when I started to go alone I had to learn not to lose my way in the endless labyrinth of trees and plants. At first I gave the natives a good laugh. In my anxiety not to lose myself I did my best to open up a trail wide enough for a horse and cart, glancing back every now and again to see if the way home was clear; many a time since that day have I appreciated to the full what those peons must have thought of me.

All too quickly came the day when Domingo Córdovez announced that we must move on. Our destination was Riobamba, to reach which a long trail must be covered. So we set off on the much-used trail over which the mule trains pass every fortnight with the rum for consumption in the interior.

Rum plays such an important part in every peon's life that it is worth a few words. It is made from fermented cane-juice, its alcohol content being so great that it burns like methylated spirits. It tastes like a mixture of benzine and molasses. Life among the peons in Ecuador is one long string of *fiestas* in which the principal part is played by this spirit, which truly deserves the name of fire-water. For most peons a *fiesta* has no other significance than an excuse for drinking himself into a blessed state of oblivion, in that state the cares of the world trouble him not. From one *fiesta* to another they go, always in a state of semi-torpor, when not actually unconscious. If it happens that, by some grave oversight, there is a week without a public *fiesta* according to the Saints' Calendar, a private one is arranged. The drink was worth when I was there $1.20 per 120 litres. Thus for one cent a man could attain to the ideal state

for about twenty-four hours. Even the peons could afford that.

The trail from La Delicia to Riobamba is reckoned first-class. It is, as a matter of fact, composed, on the level stretches, of a sea of mud, while on the gradients it has two distinct halves, one for ascending and one for descending. The road is cut out of the natural clay, which is heavy and slippery, with the result that the ascending side is one long series of parallel miniature ditches, twenty inches apart, where the mules set their feet, running at right angles to the direction of the road itself, while the descending side is smooth, hard and slippery, and serves as a slide down which the mules toboggan, enjoying the fun as much as the riders. There is no sport in the world, in my estimation, to equal coasting down the Equator on a mule. Many a time I have made trips down the mountains, when later on I lived at 14,000 feet, just for the fun of covering in five or six hours what it takes eight days to climb. When one reaches a spot where a slide begins, nothing in the world can persuade one's mule to keep to the corrugated side of the road and walk demurely down. It sticks out its ears, places its forefeet carefully on the top of the slide and away it goes! One ends up in the mud-hole at the bottom, which acts as a receiving station, generally on top, but not always. The trains of mules coming down the Riobamba-La Delicia trail with the empty rum barrels often get badly tangled up on the slides, as may be imagined. The *arrieros* (muleteers, literally "gee-upers" in *Spanish*) try to avoid trouble by one of their number stationing himself at the bottom and helping each mule out of the morass before the next arrives. Altogether it is a great sport. As the trail nears the timber-line it often leads along the face of a cliff, where it had been blasted out. At such places there is a ledge about twenty

inches wide, but the mules, being accustomed to pack bulky loads over the same trail, always walk on the very outside edge, often with a thousand-foot drop a few inches away. Indeed the rider's leg is suspended over the clouds.

Córdovez and I, mounted on the same picked mules as brought us to Delicia from Bodegas, covered the eighty-odd miles between Don Agosto's house and Riobamba in six days, having passed through the "Count's" own plantation on the way. At Riobamba, the second town in Ecuador, with its twenty thousand inhabitants, his father had his headquarters, and was known as "Papa Domingo," in order to distinguish him from his son whose name was also Domingo. Here we pulled up.

The Córdovez *ménage* at Riobamba was composed, apart from the old man himself, of a daughter-in-law, who kept house for him, and a number of servants and *peons*. The sons were scattered all over the estate, while his wife kept house (a very different kind of house to his) in Quito. He was far more at home in his rough and tumble farmhouse where the hens walked about the living-room and foraged for scraps among the refuse on the brick floor than anywhere else. He, and his sons when they paid him a visit, lived after the fashion of the peasants of the West of Ireland, only rather worse. He had no use for soap, seldom changed his clothes, and always went to bed in his boots and his hat. If you took your hat off when you sat down to supper, you were cautioned to keep it on, as everybody else did, for fear of the draught. (Most of those in whose veins runs Spanish blood live in mortal terror of a breath of fresh air.)

His house, a one-story, whitewashed red-tiled affair, had, like most others in Riobamba, a *patio* and a *corral*, the former in the centre of all the living-rooms, the latter outside the back wall. The *corral* was used for

sanitary purposes, no modern conveniences having been introduced into the country. Cooking was a simple operation. In the middle of the kitchen floor a bonfire was built, round which the servants stood manipulating pots and pans, the smoke causing their eyes to run. The drops sizzled in the frying-pans. The fleas were so numerous and hardy in that house that I used to walk the streets in preference to trying to sleep.

Apart from the other peculiarities of the place which I have mentioned already, there are two things that stand out strongly in my memory. The boys of the family had a habit of borrowing everything I had in the way of clothes and kit, and the family always opened my inward and outward mail.

It was into that household, then, that I rode (literally, for one always enters the *patio* of an Ecuadorian house on horseback) one evening in February, 1895, expecting to find something rather different from what I have described. The great extent and importance of the Córdovez ranches and plantations, the respect in which their name was held everywhere, and the knowledge that every one of them (including the old man himself) had been educated in Europe or the States, led me to expect that their houses would be models of up-to-dateness, instead of on a par with the primitive homes of their ordinary uneducated compatriots. As a matter of fact, the house in Quito which the old Senora Córdovez kept with her daughter was clean, well-furnished, and systematically run. However, when Papa Domingo went to visit that portion of his family, he had to change into a dress shirt and a black jacket, which pleased him very little, so, despite his great affection for the ladies, and his great popularity in the Capital, where he was known for his wit and his hospitality, he seldom spent much time

in his wife's house. He was far more at home shouting *"cachi"* (salt in *Quichua*) to his herds of cattle.

Here I must leave the story of my travels for a brief space, to make a few general remarks on my life in Ecuador and its special relation to this volume.

The present record is not intended to deal in detail with Ecuador, the object of this chapter being to explain how my stay in the country came to be a stepping-stone to the wanderings in the wilds in the interior of the South American continent which form the main subject of my book. At the same time, there are a few of the outstanding features of Ecuadorian life which I cannot pass over without some brief comment, either because they bear directly on my tale, or because they are intrinsically too rich in humour to be forgotten.

Instead, therefore, of giving a chronological account of the two years which I spent in Ecuador, almost exactly corresponding to the years of the calendar 1895-6, I propose treating the greater part of that period as a whole, picking out the salient features of my adventures, both commercial and social, and only returning to a connected narrative when I am dealing with the causes of my leaving the country in the way I did.

From the day of my arrival in Riobamba I was treated by the Count to a series of commercial propositions which took me all over the country, but only one of which ever came to a head; even that one ended for me in a most unsatisfactory way. Commercially speaking, then, my time in Ecuador was one long series of disappointments, due partly to my gullibility, and partly to the spirit of procrastination which permeated the country from end to end. The only bright spot in the whole story is the fact that I personally lost no money, as I had none to lose. Of the $100 with which I had started from New York, a few were left when I reached Bode-

gas; from that time on I was the guest of the Córdovez family, until certain events of which I shall speak later took place. So my finances were not a complicated matter.

But if my finances were not very complex, the innumerable machinations of my business acquaintances, and the never-ending stream of get-rich-quick propositions with which I was deluged, certainly were. I remember how we were going to put up a furniture factory, start a modern sugar plant, clear fifty acres of forest and plant coffee, build a new road over the Córdovez holdings to Bodegas, put on a service of mule teams for transporting produce to and from the interior, light Quito by electricity, irrigate the arid lands in the Riobamba valley with the snow on Chimborazo, erect a tannery to be run with the bark off the Córdovez trees, bore for oil, distill fine old Scotch whiskey, and follow up a hundred other projects which our versatile minds conceived.

Every other week I would write home of the vast fortunes which I and my associates were going to amass, until at last I was myself so bewildered that for the sake of having some really definite occupation, I was ready to do anything from prospecting for a brass mine to building a health resort on the summit of Cotopaxi. Finally, however, something on which I could at any rate get busy presented itself.

At Salinas, which is 14,000 feet above sea-level (one of the highest villages in the world outside Tibet), there was a salt-spring which was worked by the Indian villagers. The land was owned by old Córdovez, who was paid about $1,200 a year by the villagers for the mineral rights. Well, the idea was that Córdovez should take over the active working of the spring, install modern machinery and, with me as "industrial partner" (that sounded good!), make the $30,000 a year which

the spring was capable of yielding. So without any hesitation I mounted a mule and started for Salinas.

The view from Salinas is, perhaps, second to none in the world. It is bewilderingly vast. To the East, Chimborazo's mammoth dome of dazzling silver rises from the very outskirts of the town, its summit five thousand feet above. To the North stretches the *Cordillera,* grandeur piled on grandeur till it culminates in the broken cone of Antisana eighty miles away. Away to the South peak after peak of the same range, piled in one great structure of rock and ice, raise their heads above the sea of clouds which lies like a pall over the whole world. A hundred miles to the West and nearly three miles below, lies the Pacific faintly visible on a clear day, merging into the grey-blue haze which envelopes the *littoral.* Sunset is the climax of all the splendours of the day. As the sun dips to the level of the cloud blanket, its slanting beams convert it to one enormous rainbow. In a few minutes the colours fade away, and up through the gaps in the clouds shoot the last rose-coloured rays which tint the peak of Chimborazo. The world for a few brief moments is upside down. To live even for a minute in a land lighted by a sun which shines up from below through the rifts in the clouds is an experience never to be forgotten.

To reach Salinas from Riobamba one traverses some fifteen miles of desert, a wilderness of boulders and volcanic sand, when the ascent of Chimborazo commences. Five or six miles of climbing through broken, deeply fissured country, the home of the condors, where the torrents of boiling water rushed down from the crater in the old days of its activity, bring one to the *Arenal,* the great sloping plateau of volcanic sand about a mile broad which lies at the base of the dome of ice and snow which forms the summit of the mountain.

Rounding the southern shoulder on the faintly marked trail, one gets a glimpse of the Riobamba valley, with the little white specks which are villages. Down one drops again into the land of rocks and *páramo* straw, passing under precipitate cliffs and through rough cañons until the little group of thatched huts which is Salinas comes into view.

As often as not the passage is dangerous, on account of the blizzards in which the traveller can easily lose his way and perish of cold and hunger before the sun breaks through again. We, however, were fortunate, for we crossed just after a storm which had left a foot of snow.

The story of my Salinas venture is worth relating briefly, for it bears directly on the tale I have to tell.

When I arrived at what was to be my home and the place where my fortune was to be made I cannot say that it struck me as being prepossessing. In the miserable village lived a vermin-ridden population swathed in blankets, which crawled in and out of its kennel-like huts through the only opening in the wall, and lived with the chickens and guinea pigs in the straw which served for beds and fuel. Cut off from the Córdovez plantations by forty miles of coasting through mud astride a mule, I was to amass a fortune with the aid of the yellow water which oozed through the cracks in the rocks. My hut was no better than the rest, except that it boasted a mud partition between the kitchen and the bedroom, the furniture consisting of pots and pans and kettles, a few rocks for a fireplace, and a pile of *páramo* grass.

The sole industry of the village, when I arrived, was salt-water boiling. Every household owned its copper kettle, which it filled at one or other of the springs, and boiled on a fire in its own home. The women looked after the kettles, while the men packed fuel from the nearest

scrub two or three thousand feet below. They struggled hard to make a miserable living, but my mission was to take from them all they had. Consequently from the first day I was not exactly popular.

To cut a long story short, after old Córdovez, who accompanied me to the village when first I went, had advised the headman that he was going to work the salt-springs himself, and do away with the old system under which the privilege was rented out to the Indians, I announced that I would pay ten *centavos* a day for labor, male or female, and twenty per cord (about three mule-loads) of fuel. Then I set about tackling the problem of putting up a factory in that desolate spot. I imported a native coppersmith from Riobamba (paid in advance) and about ten mule-loads of sheet copper, with all the rest of the paraphernalia necessary for evaporating pans, including iron for a smoke stack. Between the feast days and private celebrations (which were observed as religiously up in Salinas as they were anywhere else) the coppersmith occasionally helped me to make the pans and build the stack. After about six months the work was well in hand. Meanwhile the villagers woke up to the fact that I was there to take away their livelihood. Also within a week or two of my arrival, I found that the headman's point of view was not mine. For him *mañana* meant any time within a month or two, and the promised labour was never forthcoming. One day I lost patience and, much to his surprise, I floored him with a "left hook." He wrote to Córdovez that "if the 'gringo' did that when he was sober, what was he to expect of him when he was drunk?" But I gradually overcame all difficulties, mechanical and social, and one fine day, after nearly a year of journeying to Guayaquil and Riobamba to fetch supplies and tools, organizing a fuel-chopping outfit and transport service, collecting rocks and clay for

the foundations and walls of the factory, and kicking the coppersmith out of his normal state of drunken semi-stupor, the furnace was lighted for the first time. When the smoke poured out of the stack the whole village turned out to see the miracle. Nothing like it had ever been seen or heard of in the whole country. Everything was in working order at last; the mules were bringing up fuel from below the timber-line, the *cachitanderas* (an *Hispano-Quichua* word meaning "salt-cake workers") were busy moulding and packing the salt for delivery to the mule and donkey trains which waited all day to take it away, and the salt was selling like hot cakes at the same price as sugar in New York.

One day there rode into the village on donkey-back an individual who made his way to my hut and walked in. He asked me for a job. Seeing before me an American the most natural thing for me to do was to ask him who he was, which I did. It was, to say the least of it, a shock to see the man there at all, but his answer certainly deserves recording.

"I'm a window-dresser from New York; have you got a drink handy?" he said.

We struck what must be one of the strangest commercial agreements on record. He was to be Assistant Manager of the salt mines at ten *centavos* a day, his duty being to see that the *cachitanderas* did not steal all the salt when my back was turned. My principal object in taking him on, as a matter of fact, was to have someone to talk to, but, after hoping in vain for a solid week that he would have a lucid moment, I paid him off, put him on a donkey in charge of a couple of Indians who supported him one on either side, and started him off on the trail to the Córdovez plantations. The last time I saw him, he was handing out his few remaining coppers to the Indians and singing a farewell to Salinas. He

was found dead a week later alongside a trail on the *littoral*. I am sure he died quite happy, for he never did anything but sing.

Trouble started soon after the factory began to run. A section of the Indians decided to get rid of the man who was standing between them and their money. So I was attacked by a party which lay in wait for me with clubs, beaten into unconsciousness, and left for dead in the road. I awoke in my bunk, whither the *mayordomo* (as they called the head-man) had packed me.

For a week I was unable to move, but at the end of that time Aurelio Córdovez, one of the sons, who had heard of the affair, arrived and stayed with me for a few days until I was on my feet.

The first pay-day, of which I have made no mention yet, deserves some comment. I started an industrial revolution (quite unconsciously, I may add) by the simple process of paying the wages which I had offered. Here I must digress for a moment on the subject of the peon system in that country.

A judge could be induced to sign any document for a trifling consideration and was consequently the tool of the white population. Thus it came about that the Indians owned none of the land which should have been theirs by right of heredity, as it had all been filched from them by process of law. Consequently they had no money, and had to give their labour in exchange for the necessities of life. Now the landowners saw to it that the longer they worked, the more hopelessly in debt they became, charging them up in the bogus accounts which were usually kept by the plantation overseers with enough to ensure their *never* being able to clear themselves. Every overseer kept a small general store for this purpose. Thus no Indian ever *received* the pay for which he nominally worked. Moreover, as everyone of them was

quite illiterate, they never had a chance of finding out whether their "accounts" were ever credited with the few *centavos* per day for which they gave their labour from sunrise to sunset.

Accordingly, when I proposed to *pay cash* at the rate of ten *centavos* per day, the Indians, who were forced to accept the proposition by threats of expulsion from the village, did not expect in the least ever to see the colour of their money. So when the first pay-day came round, nobody turned up to draw his wages. I called for the head-man, knowing nothing about the inner workings of the Indian mind at that time. He told me "of course they didn't expect to get anything." So I sent him to round them up, which he did with a mule whip. They arrived looking as if they were going to be hanged, not having believed the head-man, who in his turn didn't believe me. However, I paid them, to the great surprise of all concerned. This and the smoke stack revolutionized life in Salinas.

But the matter didn't end in Salinas. Word spread to the Córdovez plantations that I was paying out good money, and that in Salinas a man could make money instead of piling up debt by working. Gradually the Indians of my village would voluntarily come to work, instead of being driven like cattle, and I could get a man to do anything I wanted done. At last old Córdovez heard of this, and when next I met him, broached the subject. Nothing I could say would suffice to persuade him that it was not sheer folly to pay out some of the gross takings when promises would do just as well.

And that was the commencement of my quarrel with the Córdovez.

It will have become clear already that the quarrel had its origin in the complete incompatibility of our points of view, commercially speaking. As an instance of how

this misunderstanding grew, I will relate one of my experiences. When out riding with one of the sons on the road to Guaranda, an important town near one of the Córdovez ranches on the main road from Bodegas to Quito, we met an Indian walking along in the opposite direction. After a short conversation in *Quichua* which I did not understand, Córdovez made the man mount the spare horse, and we took him back to Guaranda. Arrived there, we went to a judge's house, where Córdovez sat down and made out a document to the effect that the Indian owed him two hundred *sucres,* which he agreed to work off at the rate of five centavos per day (a matter of eleven years). He handed the judge half a *sucre* in silver, for which consideration the latter was only too glad to sign and seal the deed. It was not till we had taken the man along to one of the ranches, and handed him over to the overseer that Córdovez explained to me that he was virtually a slave for life.

The gap between us widened as little by little I discovered that my own interests would never be considered, despite the family's surprise and pleasure at the success of the salt venture. As time went on, I grew to realize that I had given a year's hard work, living on mutton and guinea-pigs, for nothing. So at last one day, when my own money had given out entirely, I put in my pocket all the cash I had collected at the mine, coasted down to "The Count's" plantation at El Porvenir, and told him that I was off. And so ended my acquaintance with Salinas.

I have already mentioned that the question of my finances troubled me not one bit up to the time when I broke with the Córdovez family. It is at this point, therefore, that I ought to mention how it was that I had about 350 *sucres* when I came to leave El Porvenir (named The Future, because of the large planting of quinine trees which had been made with a view to their

bringing in a fortune fifty or sixty years afterwards when the bark could be utilized). It so happened that, just as I was handing the Count the cash balance from Salinas we were talking (he being the most serious-minded of all the family) about a small debt of some 25 *sucres,* when he said to me suddenly:

"Well, you'd better keep the money. You'll want it on your journey."

I, never dreaming that he was not speaking of the money I had in my pocket, kept the three hundred and fifty which I had brought down from the mine. Afterwards I learned that it was his intention that I should keep the twenty-five for my year's work!

So I rode off on my mule to Talagna en route for Riobamba, expecting to pick up one of the horses which were always at my disposal on the Córdovez ranch there. I was disappointed, for I found that the old man had ordered that none should be given me. So I walked the fifty-six miles to my destination, in the company of some Indians with pack-mules, who also had to cross the *Arenal* on their way to a village called San Juan. I covered the distance in eighteen hours, to the disgust of old "Papa," who assured me that "there had been a misunderstanding at Talagna"! At Riobamba, I found that two of the sons were enjoying themselves in Quito, having divided my kit between them.

CHAPTER III

EXODUS

Civil War—A warrant—A captaincy—Riobamba—The desert trail Quito—My passport—The plunge.

But my career in Ecuador had its political, as well as its commercial side, in order to trace which I must hark back to my Salinas days.

One day, shortly after Alfaro started his revolution, I happened to be in Guaranda on business. It was market-day, and the *plaza* was full of Indians selling everything from saddles to lard, including codfish glue and gents' neckwear. Suddenly there was a great tearing down of awnings, and a general stampede. It took me some time to discover that the Pretender's invading army was to be seen coming along a valley eight or ten miles away.

The populace disappeared and the troops were called out. The latter proceeded to the edge of the town, lay down, and opened fire. I followed to see the fun. They were shooting with their sights at fifty yards, and a number of them were using eight mm. cartridges in an eleven mm. rifle. I took pity on them, showed them something about the rudiments of marksmanship, and so involuntarily became associated with the Government Forces in the bloody civil war which followed.

I may mention that while in Quito some months later, when it was all over, and Alfaro was President, I learned from the official statistics that ten million rounds of ammunition were used up, while the only casualty was a man who was kicked by a mule. Those unacquainted

with that type of warfare should not be surprised, for the fact was that if the noise and smoke of the rifles of the defending force did not scare away the attackers before they came within extreme range, they, the defenders, either evacuated the town or changed their clothes and marched out with a brass band to meet the invaders, shouting "Viva Alfaro." That was exactly what happened in Guaranda. When the defenders saw that the Revolutionary column kept coming on they soon gave up firing, long before the enemy could have become aware of their desperate resistance.

The defence melted away, and the officers who had been feverishly directing the fire swapped their swords for no more harmful instruments than piccolos and drums. As Alfaro's army marched in to the music of the defenders' band, I stood and watched the show. The officers, who had surely been as heavily coated in dust as the rank and file a few minutes before, sparkled in their scintillating uniforms, neither they nor their sleek horses showing any wear and tear from the long, dusty trails. In violent contrast were the "common soldiers," an un-uniformed, hatless, bootless, ragged rabble; some of the more fortunate had picked up animals on the road—horses, mules and donkeys, some of which had no skin on their backs, while others had frying-pans and other utensils slung around their necks, clashing like cymbals as they walked. Some of the less fortunate animals carried two, or even three men; there were even donkeys with two riders facing ahead and one astern. Quite half the army had rifles, while the rest were following in their wake in the hope of a good square meal.

A few days after I had returned to Salinas (for I was still working there at the time) a party of some twenty picked officers on horseback arrived at my mountain home to arrest me, bringing with them a warrant.

But I was waiting for them, for one of my Indians had warned me of their approach. When I showed myself at the door of my hut with my Winchester, they halted about fifty yards away and saluted. One of them dismounted and came over to me. With profuse apologies for disturbing me, he handed me the warrant. There is no necessity for me to relate what I told them. The result was satisfactory, for the party rode off at once, only too glad to see the last of Salinas.

Shortly afterwards the invading army began commandeering horses from the Córdovez ranches. So "Papa" made me captain of thirty or forty Columbian horse wranglers, one of the toughest crowds I ever saw. Thanks to the fearless devotion to duty of my command, our reputation soon spread abroad, until nobody wearing a uniform of any description dared show his face within the limits of the Córdovez property. Of our many adventures among the rock-bound fastnesses above the clouds I have no time to speak. One of our greatest successes was when we rounded up a party of horse-thieves and stampeded them in the dark until they piled themselves up on a barbed-wire entanglement which we had erected for the occasion.

When there was no more fun to be had, I resigned my Captaincy and went back to Salinas, much to the disappointment of my Pastuzos (as the natives of Pasto in Colombia are called) who wanted me to return with them to their home town; they would make me a Colonel, start a Revolution, and run me for President. I am afraid I missed a career when I declined, for those fellows would have followed me anywhere.

Naturally my efforts resulted in my being unpopular with Alfaro's Lieutenants in general, and the Governor of Guaranda in particular. As a matter of fact, before I left Salinas for the last time, old Córdovez used this

as an argument in favour of my leaving the country, not that I cared much for *that* kind of pressure.

Next I come to the point where I arrived at Riobamba after leaving the Salt Mine to look after itself.

When I arrived there I was faced by two things—my unpopularity with the Córdovez family, and my unpopularity with the Government. My relations with "Papa" were considerably strained, so much so that I took my empty trunk and stayed at a "hotel" (a worse dwelling-place than my hut in Salinas). As for the Government, it was then that I realized that I was constantly exposed to the risk of being molested by some of the hordes of independent and quite unreliable minor officials of state as a result of my having dabbled in politics with such distinction.

So I sat down to think it over, and made the decision that led me into the heart of the unknown world that lies behind the Andes. I resolved then and there that, instead of returning to Guayaquil and shipping for the States, I would go up to Quito, cross the eastern *cordillera* into the valley of the River Napo, make my way down that river to the Marañon, and so on down the Amazon to Pará, whence a steamer would take me to New York. I had finished with Ecuador.

So I rode out of Riobamba on a hired mount along the desert trail which leads to Ambato, from which the *carretera* starts for Quito. Through the boulder-strewn valley of Riobamba I went, the dumping-ground of Sangai, Cotopaxi and Tungarahua, from which steam and smoke still continue to spout. I stayed the night at Ambato where I shared a room, in the approved Ecuadorian fashion, with a man and his wife.

In those days, before the light railway from Guayaquil to Quito was built, a stage-coach ran from Ambato to the Capital along the *carretera*, on which were built, at

ten-mile intervals, relay stations. The coaches themselves were built along the lines of the old Deadwood Coach and were pulled by six mules, four wheelers with a pair of leaders. Three had been broken in to harness, while three were fresh from the ranch, the latter being hitched up blindfold. Everybody mounted, while the muleteers stood by to give us a good send-off. The two drivers climbed to their seats and the word was given. The ponchos were snatched away from the wild mules' heads, the drivers cracked their whips, stamped and whistled, and the stable-hands standing round hurled rocks at the leaders. We shot away like an arrow from a bow. Except for a few bad stretches, the animals kept at a run for the whole ten miles, until we reached the first station. Then the whole comedy was played over again, and so on until we made Quito at the end of a tumultuous day.

One of the first things I did on my arrival was to call upon our Minister, Mr. J. D. Tillman, a typical member of our fine diplomatic service. I was carrying a letter of introduction from the Hon. Warner Miller, and Mr. Tillman did everything he could for me, not only then, but afterwards. Among many other things he introduced me to President Alfaro, whom he requested to furnish me with a passport which would see me safely beyond the jurisdiction of the Republic. For Mr. Tillman's courteous assistance I have always been grateful.

Here I may mention that the American population of Quito consisted, apart from the Minister himself and his wife, of a certain Mr. Solomon Sturman, the owner of a small general store, but reputed to be one of the wealthiest men in the city, and the source from which the Government obtained most of its ready cash, and a Mr. Budzikowski, a boiler-maker from Poland via New

York, who mended watches in a shop he had in the main street.

Sturman must have weighed two hundred and fifty pounds, and had muscles on him like an ox. The first time I was in his store, he rolled up his sleeve and asked me what I thought would happen to the man whom he hit. Next day I learned that the Government had lent him a permanent guard of four soldiers with fixed bayonets to escort him between his store and the hotel where he took his meals, on account of his being threatened by a hundred-pound Italian shopkeeper whom he had once robbed.

After a few gay months, I became tired of waiting to put my resolution into practice, and one day applied for my passport at the *Palacio*. I was duly presented with a magnificent document, and returned to Mr. Tillman's office to say "Good-bye" and write my farewell letter home.

I have the letter still. I append a few quotations from it, as showing how little the happy-go-lucky boy who wrote it knew what he was attempting. It is the best possible insight into my state of mind on that last day in Quito.

Quito,
Jan. 9th, 1897.

Dear Mother,

I am in the office of Mr. Tillman, the American Minister, and am writing the last communication you will receive until you see me at home. My Expedition is ready, and I start to-morrow on foot for the Napo forests, about six hundred miles, with the Indians who carry my equipment. I expect to encamp upon the Napo River, a small creek, (*sic*) and a tributary of the Marañon River, which enters the Amazon about three thousand miles from its mouth, for about one month, in order to build my canoes for the 4,000 mile trip. I take absolutely no money with me, except sufficient for my journey from Pará to New York; my small fortune I have invested in machetes, beads, and trinkets for the Indians.

It will be useless to write me on receipt of this letter, as I will be upon the way down the Napo, shooting the rapids at the rate of 150 miles a day (*sic*) in a dugout and bounding down toward the great Amazon where I will embark in a steamboat for Pará. I will arrive in Pará sometime in March or in April, but perhaps sooner so don't fail to send me the necessary papers at once. If I show up at the American Consul's office without a hair-cut or shave for half a year he will throw me out. . . .

Your affectionate son,
Fritz W. Up de Graff.

CHAPTER IV

JACK ROUSE

The mountain trail—Papallacta—The descent—Rain to order—The Inland Mail—Archidora—Edwards the Quaker—The jumping-off place—Napo.

I LEFT Quito with two Indian muleteers and four mules, well enough mounted on a hired "bronc" for the rough trail which leads from the mountain capital through the snow-covered Pass of Papallacta to the little town of the same name. Papallacta means in *Quichua,* the Ecuadorian equivalent of *Inca,* the land of potatoes. It is named thus on account of the magnificent crops of fine potatoes which grow in the country round, and form, with barley, the main subsistence of the hardy natives.

We did about thirty miles a day, arriving on the fourth day. Our trail lay through some of the finest scenery in the world, the great *cordilleras* of the Andes, which surround the capital of Ecuador. Quito is built on the *plateau* between the main eastern and western ranges of that great chain of mountains, at a height of nearly ten thousand feet above sea-level. We passed within sight of Antisana, the mighty broken cone on which the snow never melts, and which the Incas allege was the highest peak in the Andes before its top blew off in a tremendous eruption hundreds of years ago. It is still over nineteen thousand feet high. Its circumference is greater than that of either Cotapaxi or Chimborazo at the perpetual snow-level, and if the sides of the cone were prolonged, its height would even rival that of Mount Everest.

The going was very rough, with some stiff gradients. At night we stopped at Indian hostelries in the mountain

villages, when a good square evening meal of soup, eggs, meat and bread, a bed for the night, a breakfast of *locra* (a dish of onions, potatoes, barley, and sliced cheese), the use of the *corral* for one's horse, and its feed, were all provided for the sum of 10 *centavos* of an Ecuadorian *sucre,* equivalent to $0.05. Some idea of the value of money in those outlying *haciendas* (estates, *Spanish*) can be got from the fact that the daily wage of a free Indian (not a peon) was at that time 2½ *centavos,* with which he had to furnish his own food.

An incident which happened in one of these hostelries was an added proof of the complete subjection of the descendants of the lords of the South American continent to the invading Spanish. A priest who was travelling with his Inca Sancho Panza arrived while I was at my evening meal. Sitting down to eat with his squire at his feet on the dirt floor, he took the tougher pieces of food from his mouth, which he could not swallow, chew as he might, and tossed them to the Indian, who caught and devoured them like a hungry dog.

Papallacta is a collection of fifty or more mud huts, heavily thatched with *páramo* straw, the only wild vegetation to be found above the timber level. The inhabitants are all Incas, under the governorship of one of their own race, who holds the official title of *Gobernador* and carries a silver-mounted staff as the insignia of his office.

On arrival I enquired for the Governor. Armed with my all-powerful passport, I made my way to his house. Out came an old man without any pants, the two ponchos which covered him falling to his knees. He gave me the customary greeting of the Incas:

"Alabado Santisimo Sacramento!" (Praised be the Holy Sacrament.)

"Por siempre (For ever), I replied

I enquired for the Governor once more.

"I am he, *amo* (master). At your service."

I presented my passport, explaining that it was from the President. In fear and trembling he took the gaudy document and held it before his eyes, not upside down, but with the lines running vertically. After a moment's scrutiny, he was forced to confess that he did not understand the great President's handwriting. He asked me if I would do him the favour of reading it. I complied, embellishing the text with a view to avoiding delay in such a vermin-ridden spot. I am afraid I told him that the President commanded him to pick out eight of the best packers in the village, so that I might move on on the morrow. The animals one uses for the trip from Quito to Papallacta have to be abandoned at the latter point, for the trail becomes impossible for anything but foot travel.

Since leaving the Capital, I had been careful to avoid sleeping in the inns, so as not to be eaten up by vermin, so was naturally anxious to leave Papallacta, the last village before the descent into the Amazon basin, despite the magnificent view from that point. A word as to this view. To the West lies the plateau on which Quito and all the important towns of Ecuador stand, with the *cordilleras* stretching away north and south as far as the eye can see. To the east one looks out over a sea of clouds a few thousand feet below, with here and there a mountain peak rearing its head in majestic isolation, like an island of the Greek Archipelago. Far below lies the fringe of the Amazon forest. From the snow-covered heights above and around Papallacta start the crystal streams which help to swell the King of Rivers, whose muddy waters can be distinguished 150 miles out in the Atlantic.

The Governor responded readily to the President's command. He selected a set of men to carry my kit who

were, physically, the finest specimens I have ever seen. They were as thick as they were broad, due probably to the great lung capacity necessary for a man to live at an altitude of fifteen thousand feet, the perpetual snow-line at the Equator, where Papallacta stands. Their neck and leg muscles were wonderfully developed by the constant packing of one hundred and fifty pounds weight, the regulation limit for the rough mountain trails, besides the fifty-odd pounds of their own food and articles for bartering. When on the march they live on nothing but barley-flour (*máchica,* Inca) and of course brown cane sugar, which they carry together in a bag. Most of them had to stand slightly astride, by reason of the tremendous development of their calves.

The Governor always allots to each man his portion of cargo, checking the six *arrobas* (one hundred and fifty pounds) on his scales. The money is paid in advance. For the ten days packing I had to pay *sucres* 2.40 per man ($1.20). They would be away from home for over three weeks. But they were not only prepared to carry my kit for that absurd wage, they offered to carry *me.* It appears that it is the custom for priests and the few others who pass that way to be borne in a chair suspended by a band from the foreheads of the packer. In this way these herculean men traverse the crazy suspension bridges made from *bejuco* (any vine, in the *Inca* tongue), ascend and descend the precipitous sides of cliffs with no more support than toe-holds cut in the rock, and ford the boulder-strewn mountain streams. But I preferred to make my own way, though on the trail I found it very difficult to keep up with my bearers, heavily-laden though they were, while I carried nothing but my rifle and machete and a few cartridges slung in a belt.

In that part of the world a skilled woodsman can tell

his exact altitude from the vegetation. There is a series of clearly defined belts. Highest of all grows the *páramo* grass. The next belt is the low scrub; then comes a region of dwarf hardwood trees; next heavier timber of the softer woods; then the ferns begin to show, and the woods become denser; after that come the palms and wild-fruit trees where the monkeys can live; at about three thousand feet the regular tropical forests begin, choked with undergrowth, full of giant ferns, palms, orchids, vines and so on, down to the bottoms of the valleys these forests become thicker and ever thicker until finally the temperature is reached at which the giant bamboo flourishes. Here swarm beasts, birds and insects in teeming myriads.

Through all this I and my string of packers made our way. After dropping about eight thousand feet, we had to climb a hill before we could continue the descent. At the summit of this hill the Indians cautioned me, much to my surprise, not to make the slightest noise, or else the rain might come down in sheets! I, being young and foolish, sure that their fears were founded on some local superstition, decided at once that I must prove the folly of their warning. While they were picking their way cautiously among the rocks ahead of me, I fired my rifle. Immediately the rain swept down upon us.

Thinking it over afterwards, I saw how the phenomenon can be explained on a scientific basis. The clouds through which we were passing were at the dew-point, and needed only some vibration of the atmosphere to start condensation.

A similar process takes place when a wax candle which has been brought to its temperature of solidification is reduced in temperature two or three degrees more without solidifying, but can be made to change in-

stantaneously from the liquid to the solid by a clap of the hands.

My bearers were justly angry and I felt a fool, not for the first time since starting from New York. But lessons learned in such a way are more convincing than any amount of theory.

After that we went along through the cold rain and mud for several hours, dropping once more towards our objective, Archidona. The trail was well-marked. It led over precarious bridges of *bejuco* stretched across miniature canons, through which boiling mountain torrents ran, and down the sides of steep cliffs. Each day's march brought us to a lower level and a higher temperature, until at last on the tenth day we marched into the little *plaza* of Archidona. The whole place consisted of a dozen palm-wood houses grouped round the little square with a totally disproportionate church built of the same material at one end. The mail was just starting out on one of its bi-monthly journeys as we arrived. The letters are carried in a Government mail-pouch by an Indian runner who performs a feat of endurance which makes the Marathon race look like a game of croquet. He starts off at a run, and he arrives at a run, having covered the two hundred miles of rough trail in five days, reaching an altitude of fifteen thousand feet at the highest point. He is clothed in nothing but a short pair of cotton trunks. I met one of them near Papallacta also, who was carrying a switch of nettles with which to lash his legs to keep them moving. These Indians are all from the hot country of the Napo, and yet they penetrate into the snow-boound regions almost naked.

The Governor of Archidona was a white man by blood and by nature. He put me up at his house, where for the first time for a fortnight I had a bed to sleep in. His hospitality was all the more welcome by reason of the

fact that there did not appear to be another soul in the town who would have a word to say to me. The standing population was made up of the Governor himself, a handful of priests, and a few Indian servants. There was, however, a comparatively large floating population of Indian families who had their *chacras* (planted clearings —*Inca*) in the woods round about, and used Archidona as a kind of local capital. That miserable collection of shacks was the only seat of authority in Ecuador east of the Andes. The priests left me strictly alone. The Indians seemed positively to fear my approach, doubtless under the impression that contact with me meant pollution. All I saw of them was a glimpse of yellow-brown, long-haired bodies, clothed only in loin-cloths disappearing down one of the many trails leading to their forest homes.

My passport again worked wonders. Everything that could be done for me was done. The Governor and I got on splendidly. I provided him with corned beef from my kit, and he furnished an abundance of fruit and vegetables. This arrangement was appreciated by both sides, for meat was a great scarcity, the Indians having hunted out the woods for miles round and emptied the streams of fish.

I went to Archidona armed not only with my passport but with an order from the American Minister in Quito, Mr. J. D. Tillman, a brother of the prominent senator from Tennessee, for a canoe. Thereby hangs a tale.

A certain Edwards, an old-fashioned Quaker from Philadelphia, who had settled down years before to a hermit's life in a palm-thatched shack near Archidona, had been a friend of the British Consul in Quito, Mr. Stromberg, to whom he paid annual visits from his lonely retreat. Indeed, Mr. Stromberg had been his only friend, except the Indians with whom he traded the

machetes and general trade-goods which he brought from the capital on his annual trips. The old man had lived in solitary peace for a number of years, well thought of by the few with whom he came in contact. It was commonly supposed that he had withdrawn from the world on account of some great loss he had suffered. About a fortnight before my arrival on the scene, news had been brought to Quito to the effect that he had been found burned to death in the midst of the smouldering ruins of his shack. Nothing more was known officially, but it was hard to imagine why so inoffensive a person should have met with this violent end. Be that as it may be, Edwards had been murdered, and his belongings had passed into the custody of the American Government represented on the spot by their Minister in Quito. Among the few things which escaped the fire was the dugout which I was authorised to appropriate. Nothing was known of the fate of the gold which Edwards was rumoured to have collected in the course of his years of slow trading.

Accordingly I approached the Governor of Archidona on the subject. He as usual gave me his assistance at once. I had been there two or three days, so by that time was ready to start down the Napo. The town stands on that river, but at a point where navigation is well-nigh impossible, and it is necessary to travel some twenty-five miles along the forest trail to a spot known by the same name as the river itself, in order to embark. It was along that same portage that Edwards had lived.

We were talking over ways and means with a view to starting next day. The Governor promised to deliver me my dugout at Napo, the point of embarkation. He would see to it that some Indians took it round from the spot near the old man's burned-up shack where it lay beached. Suddenly an idea occurred to him.

"There's a very decent chap," he said, "an *Ingles* I think, living down near Edwards' place who drifted in from Quito a couple of months ago. I can't get much out of him, as he doesn't speak a word of Spanish or *Quichua.* I believe he's panning gold, and looks like following Edwards, if he doesn't take care. You might look him up if you care to, as you go down the trail to Napo."

With that the conversation turned to other affairs and the matter slipped from my mind. The Governor told me to send my packers back to Papallacta, and to be ready for the trail the next morning. He would supply me with men to transport my stores to the river, and a couple of canoemen to see me down to the mouth of the Sumo, the farthest point down-stream to which my Indians from Archidona would go. I paid my new porters two yards of cotton cloth apiece, and ten yards to each of the canoemen. In Quito they had told me that the only unit of exchange that would be of any use to me in Archidona was that particular class of material, which was specially woven in the Capital. I had three bales of it in my kit. It is a coarse fabric, but a favourite among the Indians. It was this cloth which completely displaced the hand-loom among the Yumbo Indians round Archidona and Loreto.

So next morning I said "Good-bye," and hit the trail once more with my new retinue.

When the Amazon forests swallowed me up for the first time that morning my mind flew back to my High School days when I had gloated over the pages of Stanley, and longed to steer my own dugout through another Dark Continent. As the forest roof closed over my head, and we began slipping and splashing through interminable fields of black mud relieved only by mountain torrents which we forded waist-deep, little did I care for

the multitudes of discomforts which awaited me in the three thousand five hundred mile journey before I could reach Pará. For all I knew or cared, I should be paddling through eternal rain, wading through eternal mud, living on what Fortune threw in my way, or starving in some trackless swamp. To Pará I was going, whether anybody had ever been that way before or not.

I had known the woods on the Pacific slopes of the Andes for a whole year, but here was something different. The same giant vegetation, the same seas of mud, the same monkeys and parrots chattering and screaming in the tree-tops, but here was the last jumping-off place before I should be buried in the Great Unknown. Only twenty-five miles ahead flowed the Napo, on whose further bank commenced the vast unexplored wilderness which stretched away toward the unchartered boundaries of Ecuador, Peru, Bolivia, and the Argentine. In that primeval maze of forest, swamp and river, peopled by men as wild and free as the animals which shared their gloomy home, untrodden by civilized man since the beginning of time, were locked a thousand secrets! Would that I could share them all!

With such thoughts in my mind I mushed ahead, pushing aside the dripping branches, soaked to the skin, tugging at my feet which stuck in the clinging slough at every step. I had started, and, equipped with the unconquerable spirit of youth, I knew nothing could stop me now.

After pushing on all day, we came across the regular halting-place, a shelter of palm-thatch with a raised floor on which to sleep clear of the mud and water. There we stayed the night. Next morning my bearers took up their packs at sunrise, and we were off on the last stretch before the river would be reached again. Through the soaking tunnel we made our way all morning, till at

last the foaming waters showed through the last few yards of forest as we emerged into the clearing where stood the town of Napo. It figures in fairly large print on some maps, the draughtsmen of which have evidently paid a great deal of attention to detail. Actually the town had no inhabitants. It is composed of one house. The house had a good roof. It stands in the middle of the clearing into which I walked, and the clearing is as important to Napo as the house itself. For it lets in the blessed sun, and you can dry your sopping kit; more important still, had I but known it then, it keeps out ants.

I took possession of the house and sat down to await the coming of my first command, piloted by my newly hired crew. It would probably measure but twenty-five feet over all, but it was for me a matter of vast importance. If it turned out to be "unseaworthy" I should have to kick my heels in Napo for three or four weeks while a new one was being chopped out.

That afternoon I was overhauling my kit and having a look to see how much had been pilfered and whether the water had got in, greasing my rifle and revolver, and putting things in shape for the trip down-stream. The time for the evening meal was approaching, and the pot was on the fire. For my packers, whom I had induced to stay with me until the canoe turned up, I was preparing a huge pot of rice boiled up with molasses. I was in the act of taking it off the fire when somebody stepped up to the house behind me, and a voice said with a good old Western drawl:

"I've heard you're pulling your freight down-stream."

"Good guess," I answered. "Bound for New York."

CHAPTER V

THE NAPO

A Renegade—The vampire bat—Afloat—Mejias the Colombian—Trade-guns—We turn aside—Loreto—A fresh team—Betrayal.

I WAS surprised, to say the least of it, to see a great, big, raw-boned, typical prospector from the West standing at the edge of the raised floor on which I was doing my cooking. Barefoot, dressed only in a cotton undershirt and a pair of home-made pants of the same material, he stood surveying me calmly. There didn't seem to be any nonsense about those clear gray eyes, and that tough square jaw. The man was evidently one accustomed to a hard life in the open. He looked a rough and ready type, perhaps a Texas Ranger. (He told me afterwards that, as a matter of fact, the Rangers were the cause of his exile.) A bald spot surmounted his rugged face, and a rough grey beard, which looked as if it had been recently trimmed up with a machete, covered his chin. He wasn't very broadly built, but at the same time he gave the impression of having a great reserve of strength. He looked a man of forty-five.

Then I remembered the Governor of Archidona's words, which had never recurred to me till that moment.

"You must be Don Juan," I said.

"That's me," came the answer. "That's all the Spanish I know, but I guess that's what they call me. My name's really Jack Rouse."

"Well, come in and have something to eat, Mr. Rouse."

"Cut out the titles," my guest put in.

"Dinner's just about ready," I went on, "the grub isn't much, but it's the best I can do."

Rouse took one look at the steaming pots of rice and beans, the open can of corned beef.

"Are you apologizing for stuff like this?" he said; "I've had nothing to eat for two months but bananas."

Even as he spoke I could see his eyes bulging in anticipation.

"Well come on, get busy"; I cried; and with that we squatted on the floor and set to work. If ever a man enjoyed a meal, it was Jack Rouse that night. The poor devil was ravenous. I could see in a moment that he was up against it badly. Half-way through the meal he paused for want of breath, and told me something of his story.

He had run away from home when he was fourteen, and had never seen his people since. Most of his family, he had heard, had since been killed by the Sioux Indians, and he, when he was out in the West hunting buffalo, "had never passed up a chance of collecting a Sioux-venir himself." He had drifted from the West to the Klondike before the big gold-rush, where he had worked as blacksmith and cook in the Ground Hog Mine. He cleared out too soon, however, but a year or two before the great discovery was made. Back to Nevada he went, and worked as messenger and driver on a stage-line. Finally he tired of risking his life for the poor pay he was getting, and got in the Company's bad books under suspicion of having turned over the mail-pouches to a pair of road-agents without putting up enough of a fight.

"Uncle Sam is looking for me," he ended up curtly.

For my part, I didn't care a hang who was looking for him. Here was a man of the right stamp for a trip through the country that lay ahead. Within half an hour of meeting him he had agreed to accompany me down-river and share with me what luck might bring. He

didn't much mind where he went as long as he went somewhere. He had seen quite enough of Archidona to last him for a long time, and as for bananas, he didn't care if he never saw another in his life.

We turned in that night on the floor of the shelter, each one of us pleased with the prospect of the journey we were to commence together on the morrow. My bearers slept at the other end of Napo, a dozen feet away. One thing struck me forcibly, and that was that the Indians swathed themselves from head to foot in the cotton blankets which each man carried as well as his food. I said something to Jack about "this bunch of mummies we've got with us," and he growled out a caustic remark on their "seeming to be afraid of the night air." And we left it at that.

We lay talking for some time, when suddenly I noticed that every now and then something would fly in at one end of the shelter, cross over our bodies, and disappear into the night at the other end. At times, as the night wore on, these spectres would pass over us so low that we could feel the air from their wings on our faces. "Owls" we decided, for they were the only things we knew of that fly so silently by night.

At last we fell off to sleep, and I did not wake up till dawn. When we got up, the first thing I noticed was a feeling of dizziness and lassitude which took me by surprise, for I had slept soundly enough. I turned to Jack to see how he felt, when I was dumbfounded to see a great ugly clot of blood hanging from the back of his head. Immediately I thought of the Indians, who were already up and about, busy with the fire. Jack confessed to feeling weak also, but as for wounds he had none. I spent the best part of a quarter of an hour searching in vain for any sign of a cut big enough

to let flow so much blood. Then I noticed a dull red patch at the foot of my own blanket, but my feet seemed to be unstained. At last I called the Indians' attention to the state of affairs, at a loss for an explanation. And then it was that I saw that one of them had left a similar pool on the floor where he had slept. The porters laughed as if it was the most natural thing in the world, and said that "the night-birds had been feeding." They immediately pointed out to us our own wounds, which we had failed to find. Jack had been tapped on the forehead, and I on the big toe.

And that was my first experience of the Vampire Bat.

The only district between Iquitos and the Andes where I have seen the real blood-sucking Vampire Bat is the zone through which the River Napo flows. It haunts its banks and the country on either side for a few miles, but, I think, never goes far inland. It is distinct from the Javelin Bat which is almost entirely frugiverous, and from the Great Vampire which measures some twenty-eight inches across and is quite inoffensive.

In general it resembles an ordinary bat, except that it is somewhat larger. Its spread of wings measures between ten and twelve inches. It may have been fruit-eating at some time, but, if so, like the New Zealand parrot which destroys sheep, it has turned from fruit to a stronger diet. Be that as it may, it now lives on blood sucked from live animals and men. It would appear that this is the sole form of sustenance of this particular species, although in the case of the Javelin Bat the mixture of fruit and blood as a diet is suspected, thus marking an intermediary stage in the process of transition. There are at the same time a number of other varieties of the Bat family which are commonly known as "Vampires," probably from their diabolical appearance, but which are erroneously named, inasmuch as the name

popularly means blood-suckers; as a matter of fact they are either frugiverous or insectivorous.

The blood-sucking Vampire Bat is equipped with two pairs of very sharp eye-teeth. The wounds which it makes are perfectly cylindrical, about an eighth of an inch in diameter, and a sixteenth of an inch deep, made in the form of a cone, as if by a counter-sink for a screwhead. Where the flesh is covered with a thick skin, as on the feet, the hole is much larger, to allow this sixteenth of an inch puncture to be made in the flesh itself. It appears that this is necessary, for the proper flow of blood to be obtained. These perfectly circular wounds are probably made by the incisor teeth, which have sharp cutting edges. Furthermore, the Vampire Bats are never known to wake the sleeper whom they attack, nor do they ever attack a man who feigns sleep. I have tried to catch them at work too often. Indeed they will not even commence operations on one of a party of men while any one of them is awake. To carry out their purpose, they must hover over their victim without alighting, absolutely noiseless and immobile. A body of such weight, if it alighted, would surely wake the most unsuspecting victim.

Again it is self-evident that a wound of the depth to which they go could not be made without waking the patient, unless some form of local anaesthetic were applied. Therefore, I am forced to the conclusion that these beasts secrete an anaesthetic by means of a gland in their mouths or throats, which they inject into the wound as soon as the skin is broken. The wound also appears to be aseptic, and if care is taken it heals almost at once without leaving a mark. The effects from loss of blood last, however, for several days.

The method which the Vampire follows when feeding is not to retain the full amount of blood which it sucks

from its victim, but rather to pass the main bulk of it straight through its intestine (it has no other stomachic organs), having assimilated that portion of it which has for it a nutritious value. This I have proved many a time from the position in which I have always found the pool which has been left after an attack on my person. I must have been attacked at least twenty-five times in all, and every time I observed that the blood lay about four inches (rather more than the length of the bat's body) away from the spot from which it was drawn. No blood ever clings round the actual wound itself. Yet another proof, to my mind, of the theory given above was furnished by a case which came to my notice a few days down the Napo—at the mouth of the Suno. The owner of a trading-post lost in one night eighteen chickens which he had protected from the Vampires by wire netting. In the morning he found not only the dead birds, but the *single* marauder, which was folded up like an accordion, hanging from the roof of the coop, peacefully sleeping. How could so small an animal possibly retain the blood of so many fowls? Furthermore, my remark as to the probability that these bats do not alight while feeding is borne out by the fact that the wounds on these chickens were all in one place, the top of the comb. What chicken would allow anything to settle either on the nape of its neck or on its face and calmly go to work to bore a hole in its head?

Again, as bats have no legs, their wings being all one with their limbs, where would that Vampire have fixed its only means of support, namely the hand-like claws in the main rims of its wings, in order to be in a position to operate on its prey?

As may be imagined, these animals proved a great source of trouble on the Napo. Several members of the

Indian crews which Jack and I engaged at different times were nearly put out of commission by two or three punctures during the same night. We tried to protect ourselves and our Indians by means of *toldas* (awnings —*Spanish*) of cotton fabric, erected like mosquito bars, but we found that whenever any part of our anatomies touched the covering, the Vampires would make a hole as big as their heads through the cotton, and proceed to attack us as usual. They nearly always make for the extremities of the body, particularly the feet, forehead, nose, hands, and elbows. At other times we tried sleeping out on the sand-bars, in the hope that they would not leave the woods. At such times, we tried to avoid the necessity of sleeping under any kind of cover, as far as our heads were concerned, for the pleasure of sleeping under the stars. However, we covered our hands and feet, hoping to escape the pests should they find us. It was a vain hope, for they always performed their mysterious operations on our faces. In a word, there was no escaping them.

A great deal has been written about Vampire Bats, real and imaginary, which is misleading, if not exaggerated. For example, it is commonly stated that these animals have destroyed whole herds of cattle which have been imported into various parts of Oriental Ecuador. This may be true, but only indirectly. The obvious conclusion which one draws from such a statement is that the cattle died from loss of blood. This is not the case. They died from screw-worms, deposited by blow-flies in the wounds left by the bats, against which the cattle could not protect themselves.

The blood-sucking Vampire, contrary to its practice in the case of men, attacks animals while they are awake. I have seen them on the backs of both horses and cows

at night, hovering over their withers evidently to the great distress of the poor beasts. The bats seem to know that the superior intelligence of a man is a source of danger. The fearless tenacity which they display in the one case is as marked as their cautiousness in the other. Indeed in some parts of the Napo Valley there is a smaller species of blood-sucking bat which preys on cattle, but has never been known to attack a man. The Vampire Bat is for me the most repulsive of the innumerable pests of the Amazon country, a thing which has sent a shudder down my back many a time.

After discovering the cause of our weakness, we fell to talking of our start down-stream. The question of food occurred to us, and Jack's mention of the splendid bananas on which he had been living (not that they were splendid to him), made me anxious to take a supply. So he promised to pack out a bunch, together with his few belongings—his gold-pan, a pair of shoes, and a machete. He said that he would call in at Edwards' old shack too, and pick up a few more machetes which he could find among the debris of the fire. So he went off, and left me to pack up and wait for the canoe.

He was back in a few hours, by which time our two Yumbos had come floating in from Archidona in the new craft.

The canoemen were short and slightly built, no match for the Indians of Papallacta. Their hair was cropped, and they wore nothing but a pair of cotton trunks dyed purple. I didn't know as much about Indians at that time as I did a year or two after or I might have detected what may be called "The Good-Bye Look" in their crafty eyes. As it was, I set out on that trail in all innocence.

We all heaved my stores into the dugout, a well-made but as it turned out, badly designed) cedar one, some

thirty feet in length, with more beam than is usual in such a craft, namely about thirty inches. Jack's kit didn't occupy much space. It was stored in a couple of patch pockets sown on his drawers. Edwards' old machetes turned out to be worthless, having lost their temper in the fire.

By two o'clock we were off. I was in high spirits, for my dream was coming true. Jack, too, was jubiliant to be leaving that "goldless, grubless spot." All went swimmingly that day. The rough canoeing was a novelty to us, and every fresh bend in the river was something to which we looked forward eagerly. It rained, but not incessantly, as it does farther down the Napo during the winter months. The progress that we made was good, helped onward by the swift current. The Napo is at that point extremely difficult to ascend for the same reason, and because of its broken, rocky bed. It is, however, a gigantic river, as measured by European standards, and the conditions ruling at one end of it cannot be taken as a criterion of those at the other. Its total length is some eight hundred and fifty miles, of which six hundred are navigable, i.e., from the junction with the Aguarico, which comes down from Colombia, and forms the boundary between Ecuador and that country along its lower reaches, to its discharge in the Marañon. To be more accurate, it is navigable for river steamers with a four-foot draft even at low water over this distance. I mention these data as they give one an impression of the Amazon basin as a whole.

After about three hours' paddling, we camped on a rock-strewn shore, where Jack showed signs of his early training as cook. He fell to on my stores with more than ordinary interest, while I watched the Indians building a palm-thatch shelter, an operation which was of great interest to me, as it was the first time I had

ever seen it done. (Of the making of these shelters, which are in general use throughout the whole of the Amazon basin, I shall speak later.) I was still to learn to how many uses the omnipresent palm-leaves of those forests can be put.

I was already beginning to find out that Jack, with his varied experience of outdoor life, was not only a good companion, but a first-rate woodsman. That was the beginning of a friendship which lasted through the many joys and troubles of four years in the forests. Had we but known that we were destined to pass so many days and nights with no company but each other, we should probably not have talked so much that night before we finally fell asleep swearing that we would slaughter the first Vampire that dared approach.

We awoke next morning to find ourselves alone, and tapped. Little by little, during our passage down the Napo, the hopelessness of trying to out-manoeuvre the vampires was borne in on us throughout a succession of nights during which we were attacked with fiendish regularity. Jack appeared to be the favourite, perhaps because he had not smoked for years. I shall not again refer to the regular blood-letting from which we suffered at that time, for no one case was different from any other. Suffice it to say that we never succeeded in even seeing a bat at work, much less catching one. It was not till later that we had the pleasure, unique for us, of killing one of these cunning night visitors

Being as yet unacquainted with the tricks of the Indians, we thought that our canoemen must have gone off early to look for game. Slowly it dawned on us, after a fruitless search, that we were really alone, and would have to paddle our own canoe, an art of which we were by no means masters at that time. The Yumbos, of

course, had deserted, having received their pay before we started, and added to it a few little items of my kit which took their fancy, in order to avoid the long trek back from the Suno River to Archidona.

But the Indians were not the only wily customers in the old Amazon rubber trade, as we soon found out.

Left to our own devices, we entered upon a period of devil-may-care, go-as-you-please existence. We stopped to swim when the spirit moved us. Our arrival off a particularly enticing sand-bar would be the signal for a halt for food, whatever the hour; in the evening we beached our canoe purposely early so as to have plenty of time to try our hand at the new game of house building; we shot at everything we saw which might or might not be good to eat. We had time and powder to burn. Nobody was waiting for us on the pier at New York. There was nobody to say us yea or nay. We were having a splendid time.

After three or four days we reached the mouth of the Suno, a tributary of the Napo on its left bank, where we found the Colombian trader Mejías, of whom we had been told in Archidona. He had passed through the local capital some time before, on one of his semi-annual trading trips, bringing down merchandise from Quito, and returning laden with rubber and gold. He had a house of sorts at the point where the two rivers meet, where he kept an Indian or two to look after the product of his trading at such times as he had any. His plan of campaign was to pay visits to Indian settlements in the vicinity, and advance trade-goods against rubber, collecting the latter on his next visit. He also had a persuasive personality, which served him in good stead when he encountered a canoe-load of Indians laden with somebody else's rubber, for which they had already been

paid by the rightful owner. He was a good Indian who could brush aside his tempting offers and get safely past.

Our meeting with Mejías played no small part in the shaping of our fortunes. From the first moment of our intercourse we got on well together. He provided us with a great deal of useful information concerning the ways of the Indians and how to handle them, the ins and outs of the rubber business, and the geography of the country. He certainly knew a great deal about the Upper Napo. We decided as a result of our conversation to go in for the rubber trade. For that we needed such things as "trade guns," powder and shot, percussion caps, and more machetes and axes. I accordingly traded with the Colombian my imitation jewellery and cotton cloth (which the Yumbo Indians call *chamalote*) which I had brought all the way from Quito for bartering, in exchange for which he fitted us out with the kind of goods I have mentioned above, which were more appropriate for paying Indians to act as *caucheros* (rubber-collectors—Spanish) and canoemen. The usual procedure was to pay with such goods in advance, the Indians engaging themselves to serve for six months and repay you for the goods in *arrobas* of rubber according to the recognized scale of exchange. The *arroba* is a Spanish weight originally, to which no fixed standard can be assigned. Even in different parts of Spain itself it varies. In Brazil it is equivalent to thirty-two English pounds, in Ecuador and Peru to twenty-five. But the Indians have no scales, and accordingly for them the *arroba* was a thing of bulk and not of weight. They were simply shown a sample ball of rubber, weighing anything up to a hundred pounds, and told that that was an *arroba*. A trade-gun was held to be worth three *arrobas* in the case of a single-barrelled gun, and six

in the case of a double. Machetes, axes, and so forth, were valued in proportion.

"Trade-gun" was the name given to a muzzle-loading weapon—if it can be so called—which was specially manufactured, probably in Germany, for the Amazon rubber trade, where many thousands were sold. They were so constructed that they would be worthless after forty or fifty shots at the most, compelling their owners to start working again for the possession of a new one. (Once in possession of a high-grade gun, no Indian would have ever worked rubber again.) Their barrels were made of wire wound on a bar, the latter turned to a slightly conical shape, so that it could be withdrawn after the winding was finished. They were then heated and dipped in solder, smoothed off and painted blue or grey. The lock was simple in the extreme, manufactured with the same attention to detail as the barrels. Not more than a thimbleful of powder was put in as a charge. When fired, three distinct noises were emitted, the interval between them varying in strict accordance with the degree of dampness of the powder. First the snap of the cap, which as a general rule functioned promptly; next, a more or less prolonged fizzing, as the powder gathered strength; lastly, a snort like a wild pig as the charge left the muzzle, on the occasions on which it did. As often as not, the charge fizzed itself to death through the touch hole. As it was a matter of speculation as to just when the charge *would* leave the muzzle, the quarry had to be carefully followed round the horizon in the case of a wing shot, or covered as it ran, the hunter running also, in the case of ground game. The guns were deadly at forty feet. Toward the end of their life, or if too big a charge were used, the barrel would unwind in the most ludicrous fashion. Those weapons might even be used, as are the *bolas* in

the Argentine, for entangling the feet of the quarry. Of my personal experiences with trade-guns I shall speak later.

As we were talking with Mejías of going in for rubber, he happened to mention the existence of an unexplored river, the Yasuni, which flows into the Napo just above the Aguarico from the south. Its banks were, he said, reputed to be inhabited by two unknown tribes of savages, *infieles,* the Spanish-speaking South Americans call them. No one had ever ventured up the Yasuni. Not even the *caucheros* who knew the Napo well had ever been able to persuade their Indians to accompany them into the gloomy forests which lined its banks. Little though Mejías suspected it, he was unfolding before us a venture which appealed above all others to both of us; to Jack, a born prospector, it opened up visions of gold-working descendants of the Incas in possession of the hidden treasures of the Ancients; in me it awakened the old longing to explore where no white man had ever trodden before.

So we postponed our journey to New York in favour of the Yasuni, little thinking how long we should be buried alive, or what my family and friends would say when we failed to put in an appearance. We told Mejías of our decision, and arranged to leave our canoe and stores at his post while we went up the trail to Loreto on foot to find Indians for our expedition. Loreto is a village two or three days' march up the Suno from its mouth. It is, like Archidona, a centre of exchange, where the trader displays his wares to the Indians who come in from the surrounding *chacras,* and labour is given in exchange for trade goods. It is a mere collection of palm houses, like Archidona.

So we availed ourselves of his offer to keep our things for us until we returned, and hit the trail for Loreto,

with two porter-guides lent us by the Colombian. Three days of marching through the inevitable mud brought us to our destination. On arrival we took possession of one of the empty huts (the whole "town" was common property) and approached the inhabitants on the subject of the canoemen we had come to engage. We were told to go to the local Indian chief, who lived on a *chacra* half a day's march away. We found him the next day. He and his wife were grey-headed, intelligent old people, living with their two brawny sons in a typical Yumbo house, built of palm-wood uprights and walls with a heavily thatched roof. It was furnished with bamboo beds, a stone fireplace, and earthenware pots, with a sprinkling of iron utensils imported by traders. They had a well-kept *chacra,* in which they reared the ever-present bananas and *yuca* (the Spanish name for cassava or arrowroot), the two main staple articles of food of all the people on the Upper Amazon basin and its tributaries. They also kept fowls, and followed the curious practice of cutting the roosters' vocal cords to avoid being located by strangers. It was a comical sight to see them going through all the motions of crowing without uttering a sound.

The old man took an intelligent interest in the welfare of his people, enquiring most carefully as to our intentions, the pay we would give, and the date of our return. We made him a present of a trade-gun, assuring him that it was absolutely *yanga mahta* (gratis) if he would aid us in securing five experienced rubber-workers to go with us "down the Napo." We dared not mention the Yasuni by name, for that would have meant the end of all things. He fulfilled his contract. The men were found. My knowledge of the *Quichua* tongue, picked up in Occidental Ecuador, stood me in good stead. Without it we should have been in a poor way, for Jack spoke

not a word of it. The men picked were a fine-looking lot, little more than youths, led by one whose name was Santiago.

But we were faced with a disappointment. We had to sit down in Loreto for three solid weeks while the Indians prepared their marching kit. It came as a great surprise to us that they should take so long about it. We had imagined that they would be ready within twenty-four hours of agreeing to go. Here it was, then, that we made our first acquaintance with *masata,* as the Yumbos call the arrowroot pulp preserved with human saliva which they drink with every meal. Their women prepare it for them by masticating cooked *yuca* root, and packing it in palm-leaf-lined baskets. It is a long process, identical with the making of the *giamanchi* of the Antipas of which I shall speak at greater length later on.

We too were forced to subsist on *masata* to a certain extent. Many a day we sat about waiting for our breakfast to be chewed for us. Jack, I remember, took exception to the *masata* prepared by an old hag who had but a few teeth left and did the work with her gums and her tongue.

I will pass quickly over that period of boredom, relieved only by the necessity of constantly urging our Indians, whom we had paid already a trade-gun apiece, to greater speed in their preparations. Finally they were ready, equipped only with their guns (which still retained their barrels intact) and about a hundred and fifty pounds of *masata* apiece. The total lack of game round Loreto had certainly deprived us of many a square meal, but perhaps the balance was in our favour, as our rubber-workers had, by the same token, been unable to fire their guns. The latter might, by then, have reached the unwinding stage. In order to save time and transport

our heavy stores of *masata* as easily as possible, we boarded a canoe, and arrived back at Mejías' post in a short day. I passed the day in explaining to the Indians that I had a fine assortment of trade goods awaiting us at the mouth of the Suno.

We stepped ashore, and entered the Colombian's house. It was empty.

CHAPTER VI

THE LAW OF THE FOREST

Pursuit—Don Elias Andrade—The Long River—The *Paña*—The Anaconda—The Maquisapa—A find and a loss

"I KNOW where he has gone."

One of the canoemen was speaking. Jack and I turned to one another and saw what was in each other's eye. A man's cache in the woods is sacred property. To steal it is the worst offence against the Law of the Forests. To have overlooked the Colombian's crime would have been as impossible for Jack, with his inbred instinct of the justice of the mining-camps and cow country as for me with my national pride. So each had decided for himself that the matter had not ended there. Our Indians, who knew the way, should take us to Mejias' camp without further ado. Mejías had not reckoned with the fact that other Indians besides his own knew of his haunts in the rubber-woods.

We left the post at once, going down the Napo in our dugout. The following day, we arrived at the mouth of a small, inconspicuous, deep-water creek on the right bank, the place where the Colombian was supposed to have turned into the forests. A few miles up the creek we came across the permanent cache which he had erected in which to stow his rubber. There was nobody there, for in that desolate spot there was no fear of its being disturbed. There were not more than two or three white men operating in the whole Upper Napo zone, and no Yumbos will ever disturb a cache. We found, however, the majority of our stores. The next thing was to find Mejías.

Our Indians followed his trail without the least difficulty. Mejías himself was wearing *alpargates* (Spanish canvas shoes with hempen soles), so there was no mistaking the trail, as it led us further and further south. We came across two or three temporary shelters where he and his party had passed the night. On the third day it became probable that we should catch them at any moment, as the trail showed that they were spreading out in search of rubber, and moving slowly. We wanted, however, to come up with them after they had stopped for the night. At last we heard them chopping. Our leading Indian halted, and, with that quiet, significant gesture of theirs, pointed with his chin in the direction of the noise. We started to advance cautiously on the camp, with the intention of holding Mejías up at the point of a gun and demanding an explanation. We got to within a few yards of the clearing when we were spotted. Mejías seized a rifle and ran for the edge of the open space, looking "plumb hostile" to use Jack's phrase. There was nothing left but to be the first to shoot. Jack was carrying my old .45 Colt given to me by Mr. Dillard at Guayaquil, a deadly weapon in the hands of an expert. Mejías virtually committed suicide.

His death was not resented by his Indians, after the circumstances of the case had been explained to them. We took back all that belonged to us, and left them to do what they wanted with the rest. We trailed back to our canoe, and continued on our way down the Napo.

Two days travelling brought us to the next rubber-post, a place established by a certain Senor Abarca on the left bank. To him we explained what had happened, and were relieved to find that Mejías had enjoyed a very unsavoury reputation, and that we had acted strictly in accordance with the Unwritten Law of the land. Of the Yasuni, the possibilities of which now loomed great

in our imaginations, he knew but little. He referred us to Don Elias Andrade, however, the King of the Napo, who lived in a commodious thatched house two days further down-stream, a little beyond the mouth of the Yasuni itself, and an hour's canoeing up the Aguarica, the largest tributary of the Napo, nearly equal in size to the Napo itself. Accordingly, we set off once more for Andrade's post.

Andrade was an Ecuadorian *cauchero,* who had established himself with an important post in a well-chosen spot. The junction of the two most important rivers northwest of Iquitos was a site which could not be improved upon in the whole district. Andrade commanded the trade of two rivers. His house stood back some twenty-five yards from the water, a two-story affair with a large verandah running round three sides of it, facing a scalped court. He commanded a view of the Aguarica, which is a mile wide at that point. He possessed a steam-launch with which he "policed" the river, stopping and questioning anybody who might approach, in that way controlling trade. Behind his house was a plantation of good proportions, enlarged still more by the numerous *chacras* of his Indians, who lived there half the year, and were out working rubber for him the other half. He had, in fact, founded his own small colony, over which he presided, living there with his wife, his son, and two daughters.

His equipment consisted of a set of carpenter's tools with which he made his furniture, a collection of simple agricultural tools such as hoes, picks and shovels, and finally an assortment of bogus scales, with which to add to the profits of his business.

We personally had no complaints to make about our reception. He took us into his family circle, gave us a house to stay in for the few nights we were there, and

invited us to dine at his board. He had built himself a table on which meals were taken on the verandah.

At dinner on the first evening, he asked if we were accustomed to take *masata*. We replied that we were, when the old man turned to us and said with a smile:

"I can recommend this specially: it has been chewed by my daughters."

His daughters, who sat at table with us, blushed their acknowledgment of the compliment.

Andrade had never been up the Yasuní. He gave it as his opinon, however, that there should be a great deal of rubber there. He had for some time intended to take a well-armed party up on his steam-boat if it were navigable. It was true he said, that the adjacent country was inhabited by *infieles*. And that was all we could find out about the river we had set our hearts on exploring. From time to time we had broached the subject of the Yasuní to our Yumboa. At first they seemed very shy of entering the place of evil repute. But little by little we persuaded them, by extra pay and a promise of return should the *infieles* molest us, that they were afraid of a more or less nebulous bogey. Finally they consented to go with us, spurred on by our suggestion that when they returned home they would be the lions of their tribe.

We took on board food supplies, both canned and fresh, and a Winchester for Jack, buying them from the Ecuadorian's ample store, and paying for them with some of my "pearl" necklaces, which he fancied for his daughters. We were off.

With one of Andrade's Indian's as pilot, we made down toward the mouth of the Aguarica, where he instructed our Indians as to the easiest way to cross the Napo and land at the mouth of the Yasuní. This we managed without difficulty.

The Yasuní is named from the Inca *yacu suni,* meaning "Long River." Of its length we were, of course, at that time absolutely ignorant, but I am able to say, as a result of our experiences there, that it must measure some two hundred and fifty miles in all. It follows a very tortuous course throughout its whole length. For so long a river it is very narrow, measuring only about thirty yards at its widest point. It is sluggish and deep, after once leaving the rocky bed through which it flows for the first fifty miles or so. The dense verdure in many places covers it with an unbroken roof for a considerable stretch, which shades the water from the sun, and makes paddling very pleasant except at high water, when the danger of overhanging branches is always present. Particularly is this true of the first hundred and fifty miles of its course. On the Yasuní one feels indeed that one is in the very heart of the forest.

There are still hundreds of such rivers and streams which no white man has ever yet explored, minor tributaries of the Santiago, the Aguarica, the Ucayali, and the Maranon. Now that the old rubber trade of the Amazon has almost vanished, presumably for ever, the posts and settlements have been deserted and have fallen into decay, and the regular lines of steamers which used to ply the waters of so many of the main rivers have disappeared, it seems likely that for centuries to come countless miles of country in the Amazon basin will remain untrodden by any white man.

Now, our journey into the winding forest-tunnel known as the Long River may be divided into various periods, the first of which covered the twenty-odd days paddling after entering its mouth. I propose, then, to treat this phase as a whole, as many days were much the same as each other, and it would be impossible (even if it were desirable) for me to record our progress day by day.

I kept no journal, the idea never having occurred to me at that time of publishing any record of my travels Certain of the outstanding events, however, of those days left such a clear impression on my mind that I have no difficulty in recalling them accurately. Of these I shall speak, grouping them together under the whole period I have mentioned.

The Indians worked well. They enjoyed the hunting, which was excellent. Monkeys of all the thirteen species known to me to live in the Amazon woods abounded. I started a collection of their skulls which I rescued from the stew-pot, from the tiny *pichico* (*Inca*) to the baboon-like *coto* (*Inca*), an array of specimens which I lost in the strenuous days that followed. Monkeys formed the chief diet of our Indians and it was there that I began to appreciate their meat, a taste which grew as time went on. Wild turkeys (Guans) were so numerous that we would shoot them from the canoe and pick them out of the water. Tapirs were seen daily as were *capabarra*, the largest of the rodents. The latter weigh up to a hundred pounds, but, unlike the tapir, which is as good as beef, their meat is unpalatable. A host of other kinds of game fell to our guns, such as pheasants and partridges of a kind, running birds of various species, and parrots, which at times literally darkened the sky. In short, there was no lack of good meat.

Fish, too, were plentiful. When we passed a small inlet in whose still, clear waters we could see them swimming, we threw in a line. But at first we could never land a single one, for the moment they were hooked, they bit through the line. So we had to resort to a "line" made of sardine tin keys, with which we made our first catch. Although the Indians cautioned us that it would bite, I succeeded in extracting the hook from its mouth, when it fell to the bottom of the canoe. It

promptly snapped at Jack's feet, making a wound like a miniature shark, namely, two deep-cut half-circles. This fish is known in Brazil as the *piranha,* to the Incas as the *paña.* In appearance it resembles our sunfish, and like the latter makes excellent eating. A large one would weigh about two and a half pounds. I imagine that the presence of this fish in so many of the still waters accounts for the reluctance with which the thin-skinned animals pass through them. It is equipped with one row of sharp teeth in either jaw, which are shaped like those of the shark, which it equals, or even surpasses, in ferocity. Either in the water or on dry land it is as vicious as a mad dog. It attacks a man in either element without provocation. I doubt whether a man could emerge alive from an attempt to swim a stream teeming with *pañas.*

Colonel Theodore Roosevelt, when speaking of these fish in his fascinating account of his South American travels did not, I think, mention what to me seemed a most singular characteristic of the species. It is this. Flopping about in the canoe or on the bank. The *paña* emits a noise that can only be described as a low-pitched bark—more striking, if not more formidable, than even its bite.

After a few days paddling we caught sight of a number of rubber trees growing along the bank, and decided to get the Indians to show us how to select and work them. We learned the well-known rudiments of the process of locating the trees, testing the sap, proving the tree by the bark and leaf, and finally tapping the falling trunk and collecting the milk. It was not till later that we went seriously to work, however.

But rubber-milk is not the only milk which flows in the Amazon country. The Indians showed us on the Yasuní a secret of the woods which was to our untrained eyes

little short of a miracle. Sticking a machete into a large, smooth-barked, red-brown tree one morning, one of them drew from the wound a pint of fluid as near to milk in appearance and taste as could be imagined. He assured us that it was *súmaj* (good) and, to prove it, drank some. We always used it after that for our coffee, which it enriched as well as the real thing.

One day we came to the conclusion that the river must have fallen considerably. Being constantly on the move, we had no means of judging how much, but we kept on meeting with as many obstructions in the shape of fallen trunks which lay from bank to bank only half submerged that we were sure of having judged aright. In such cases we had either to empty the canoe, fill it with water and pass it under the log, or cut to water-level a gap in the log itself, wide enough for the passage of the dug-out, and place "Slippery Balsa wood" bark on it. In the latter case the procedure would be to load the stern of the canoe with cargo and crew, paddle hard at the log until we were half-way over, and then move all the weight into the bow. In this way we easily slid over. The cutting of the gaps in these logs was my introduction to the practical difficulties of dealing with hard-wood, a lesson which was all the more difficult as I was a novice in the use of the axe. Jack, who had served his time in our northern lumber camps, was an expert, and he taught me the art. The logs which had fallen and blocked the river were all hard-wood trees. Had they not been, they would have rotted away within a few months (with the exception of the cedar, which lasts a few years). It generally cost us two or three hours' hard labour to pass one of these obstructions. Owing to the low state of the water, then, we decided to pitch a camp, and wait till some rain should fall and give us two or three feet more water in which to manoeuvre.

We were by that time in good rubber-country, so we took advantage of the opportunity to prospect for what was then the most valuable product of the Amazon forests. We went about marking trees, the simple process by which the first comer claims them for his own. Anywhere on the Amazon a simple axe-mark suffices to advertise to all and sundry that the tree has passed into the absolute possession of him who made it. It is the cattle-brand of the woods. But the rubber-producing areas are so vast that there is seldom a clash of arms between prospectors. As for the Yasuní itself, never from the first day to the last of that expedition did I find the slightest sign of a former visit by civilized man. All I saw up that river from start to finish confirmed my hope that we were the first *huiracuches* (white men—*Inca*) to pass that way.

The five Yumbos went to work on the making of a small clearing, and the construction of a thatched shelter on the right bank. In a few hours we were installed with our stores landed and stowed under cover. In front of the shack was a swimming-pool, with a miniature sand-bar. We had plenty to eat, and life was altogether very pleasant.

It was there, in that pool, that we found the first giant reptile of our travels, an anaconda, a species for which the Amazon and its tributaries are noted. The anaconda, a member of the boa family, is the largest snake in the world, growing to a length of *fifty feet* and more, with a correspondingly immense girth. Its skin is of no particular colour, its general appearance being black, while the boa has a mottled colouration which harmonizes with its surroundings in the forest. The boa is more frequently found on the land than the anaconda though both are water snakes. The latter's head is built on the same lines as those of other non-

poisonous snakes. It has a row of powerful teeth on each side of the jaws, slightly curved and sloping toward the throat. Its jaws, of course, become disjointed in the act of swallowing its prey. Its mouth and throat, when in a normal condition, would not admit anything larger than a rabbit. Like the python, it sleeps for a long period after feeding. Curiously enough, although essentially a water-snake, it lives chiefly on land mammals.

While bathing one morning, I stepped on what I took to be the bottom of the pool, when suddenly I felt it heave under me. Some of the Indians were in with me at the time. Thinking that I had stepped on a stinging ray, with which such rivers are infested, I struck out for the band as hard as I could, shouting the news. The Indians on the bank ran for the canoe, armed with pointed sticks to spear the fish. One glance into the water showed them what really lurked there. Undaunted they attacked it with their spears. The huge reptile, which turned out to be thirty feet long, to our great surprise did not put up a fight for its life. Judging from my later experiences, I think it must have just taken to the water after one of its comatose periods, a theory borne out by the fact that we found an almost totally digested deer in its stomach, although it is unusual for these monsters to return to the water so soon. Having killed it finally with a shot which cut it in two, about three feet from the head, we dragged it ashore. The seven of us had a hard task to drag out the still squirming body and deposit it on the sand-bar. We skinned it. We had to work all day to complete the operation, slitting the skin from end to end along the snake's under side and tearing it inch by inch from the flesh. The work was not even over when at last we had hacked away the last of the clinging carcass. In order to pre-

serve the skin we had to make a frame with two thirty-foot saplings, upon which to stretch it and place it in the sun. Finally a thatched shelter as long as the skin itself had to be built to protect it from the rain while it was drying. By the time we had rolled it into a cylindrical package about three feet high and stowed it in the canoe we nearly had a mutiny. After packing it along with us for a few days we began to fear the *infieles* would smell us coming. Jack said its only use was that it made it unnecessary to cut a trail when out hunting. At last, after trying in vain to keep it dry, we left it to the ants in one of our temporary camps.

As yet no sign of the savages for which the Yasuní was famed had been seen. The country seemed never to have been disturbed throughout the ages. So perfect was the solitude of these primeval forests that we might have been traversing another world. Virgin Nature reigned in unchallenged supremacy throughout that land of trees and rivers, which must resemble, in many ways, the mesozoic swamps which covered the earth hundreds of thousands of years ago. I felt that, at any moment, we might meet a *brontosaurus* or a *diplodocus* round the next bend.

Steadily we were going ahead once more, the rain having swollen the river and made progress easier. The Yumbos seemed to have forgotten their old terror of the locality. We were satisfied that we had struck as good a crew as could have been found in the Napo country. I suppose we were nominally prospecting for rubber or gold, or both, but for me neither one nor the other meant anything. What mattered was that we were pioneering. Day by day we were buried deeper in the Unknown.

Maquisapa hunting was one of our principal sports (*maqui*—in *Quichu* means "hands"; sapa is a superlative

affix meaning all, most, largest, etc. The name was therefore given to this monkey because of his large and agile limbs). The *maquisapa* is jet-black, with white markings on face and head. It has a long, prehensile tail. It looks like a bunch of animated rope with five ends. It moves through the trees as quickly as a man can run. The result is that hunting this species is an arduous game. The *maquisapa* gives as good sport as the best wild-fowling, for you can never get a still shot. The Indians can, or else they would never bring one down at all with their trade guns. They stalk them with a skill which no white man can equal. Often they conceal themselves in the undergrowth, and call to the monkeys in their own language until they come within range. At such times we could never tell which spoke, monkey or Yumbo.

It was when out hunting these animals one day that I saw a fine specimen of the bright-green whip-snake. It is commonly stated that this species of the arboreal snakes never grows beyond two feet in length. The one I saw, however, measured five without a doubt. It was gliding along a branch within twenty feet of my head, hunting, as the Indians told me, for birds' nests.

By the end of three weeks of intimate association with the Yumbo lads, we had picked up a deal of woodcraft which was new to us. We could hunt, fish, paddle, pole, and pitch a camp with the best of them. Moreover, by that time the monotony of the interminable level stretches was giving place to more defined banks and slight undulations, indicating the proximity of the hilly country, where we might expect to find more rubber than in the lowlands. It was always impossible, however, to get a view of the surrounding country. The tallest trees are of so great a girth as to be unclimbable. Even though it might be possible to scale them with

great peril with the help of the *bejucos* which hang from the upper limbs, the risk of a bite from one of the scorpions, centipedes or ants which live aloft would be too great. One is a prisoner of the forest.

So it was that the idea occurred to us of leaving the river and striking inland for a day's march (perhaps ten miles) and building a permanent camp from which to prospect for rubber and *infieles*. One evening, we drew our canoe clear of the water, some fifteen feet above its level, and there we cached it, bottom up. Next morning, leaving our stores until we should decide definitely on a site for our headquarters, we dived into the bush. It seemed that we could never be rid of the Yasuní so many times did we come across one of its coils. Like a great serpent it had us in its grip. Finally, in despair we forded it, hoping to find freedom on its other bank. Again we were held up within a mile. We struck out in a new direction, the most likely to our minds, and found ourselves free from it at last.

After two hours marching we saw the Indians, who were leading, halt. "The river again," we thought. We came up with them, preparing for another swim. One of them stretched out his chin; we followed the direction of his movement. Before us lay a trail with human footprints plainly marked in the mud. There was no mistaking the animal that had made them. From the ball of the foot sprouted the five toe-marks like the spokes of a wheel.

Our find had an electrifying effect on us. "Now for those gold slop-buckets!" cried Jack.

Poor old Jack; his theory was always that gold, being the most ductile of the metals for shaping into household utensils, must be used for anything and everything by those savages whom one day we should find. For my part, I was not quite so sanguine about the gold pots

and pans, but I was determined to try to find and make friends with the men at whose footprints we stood and gazed—men who would be able to help us to work that unknown country, and drag from it any wealth that it might contain. There is a vein of avarice in every man.

The Indians decided that the trail was a hunting-trail, and consequently a long one. They thought that it led up-river to the higher land. We came to the conclusion that we should have plenty of time to investigate it later, and therefore moved on to find suitable camping-ground from which centre we could work the surrounding country. In a short time we had found what we wanted, a patch of ground a little higher than the common level. We were now some eighteen hours march from the canoe, with a difficult trail behind us. There we built two shelters, one for Jack and myself, the other for the Yumbos. Just before reaching the place, Jack had shot a *yungaruru,* a bird the size of a chicken, whose meat and plumage resemble those of a pheasant, a rare prize (even for the Indians) by reason of its shyness. We broiled it for supper. The Indians displayed a great interest in the bird. They came to us while we were eating it, and begged for a mouthful, so that they could tell their fellow-tribesmen they had eaten one of the most coveted prizes of the hunter. Everybody was in the best of spirits that night, with the prospect of finding so soon what we had set our hearts on. Gold, rubber, *infieles*—anything might be waiting for us. We spread our rubber-sheets, turned in, and went to sleep at peace with the world. It never occurred to us to mount guard.

Next morning I was awakened by the forest voices which start with the dawn. I arose and left Jack still still rolled up in his blanket, dreaming, doubtless, of those golden buckets. I crossed the ten feet or so which

separated the two shacks. They were temporary affairs, built of a number of giant palm-leaves with their butts stuck in the ground so as to form a sloping canopy. Walking round to the open side of the one the Yumbos used, I stopped, dumbfounded at what I saw.

The place was empty.

CHAPTER VII

HUNGER

We learn our job—A monster—Disaster—We face the inevitable —A nightmare march—A trail.

As I stood looking at the deserted shack I reflected on the ways of the people of the Amazon country. It seemed that they were full of surprises. Their strong suit was apparently the disappearing trick. For the third time in two months we had had it played on us. We were evidently destined to fend for ourselves.

I returned to our own shack and awoke Jack. When he heard the news he sat up in his blankets and, prefacing his remarks with a few well-chosen words, he ended up by saying something about "the people round that part of the world not being very constant companions." However, talking would serve no good purpose. We took action. We packed up all the Yumbos had left us and started on the back trail to the canoe, which in all probability gave us more trouble in daylight than it had Santiago and the rest at night. We tramped all day as hard as we could, being unable to take a short cut to a point lower down the river than where we had landed to intercept the fugitives, as the complex windings of its course might have caused us to strike it twenty miles further up-stream as easily as twenty miles down. We carried no directional instruments, and as a matter of fact a compass is of no practical value in such country. Even though the general direction of a river may be known, a compass cannot tell you whether you have hit it above or below a given point, as to march true on a given bearing is impossible in the dense forests.

In the evening we reached our landing-place, tired and muddy. We were not in the least surprised to find our canoe gone, and with it our last hope of catching the Yumbos. Wearily we cooked a supper and turned in for the night. Next morning the idea occurred to me that Santiago would have been afraid to be seen in our canoe on the Napo without us; some awkward questions might have been asked, for there was in Archidona some sort of authority with a primitive native police force at its back. To steal a white man's canoe in that country was as bad as stealing a man's horse in the West. So we resolved to follow the river down-stream for a short way at any rate, and see whether the dugout had been left. As it turned out, we were right. We found it within a couple of hours. The Yumbos had evidently cut down that particular kind of palm which, by reason of the swelling in the trunk half-way up, adapts itself readily to the speedy manufacture of two make-shift dug-outs in a few minutes. The pith is soft, and can be easily cut away with a machete. The ends are blocked with mud. For a quick get-away on such an occasion as that they serve splendidly, but are useless as a permanent craft, for they are extremely heavy, and their low free-board causes them to fill with water and sink at the slightest provocation.

And so began the second period of my Yasuní adventure. It was a period of suffering, of a bitter realization of how much we had in reality depended on the Yumbos for our welfare, and of almost total disaster from which we were finally saved by a stroke of fortune at the eleventh hour.

At first, after we had been left on our own, we managed well enough. The first thing we did was to decide to continue our journey up-stream in search of the *infieles* of whose whereabouts we had at least some idea. From

what Santiago had said, we figured that they must be located somewhere on the head waters of the Yasuní itself. So we turned about after finding the canoe and started off cheerfully enough. We did not make such rapid progress as when the Indians had been with us; as may be imagined, they were experts in every means of propulsion. Bit by bit, however, we learned to be experts in our turn, and at the end of a few days were making about ten miles a day. Several times we were tantalized by the sight of a loop of our own stream separated from us by only two yards of land, but actually a matter of two days' poling away. There was no means of dragging our heavy canoe up the fifteen-foot clay banks. We checked our progress at such times by blazing a tree on the up-stream side of the isthmus which lay between the two sides of the "hairpin." The same peculiarity is common to many of the smaller Amazon rivers; the Sicuangua, most of which I surveyed myself, is typical.

While poling steadily along under the lee of the left bank, one day, Jack called out suddenly:

"There's a dead alligator over there! Let's get out of here."

I turned to look in the direction in which he had pointed. In a moment I saw his mistake. There lay in the mud and water, covered with flies, butterflies and insects of all sorts, the most colossal anaconda which ever my wildest dreams had conjured up. Ten or twelve feet of it lay stretched out on the bank in the mud. The rest of it lay in the clear shallow water, one huge loop of it under our canoe, its body as thick as a man's waist. I have told the story of its length many times since, but scarcely ever have been believed. It measured fifty feet for a certainty, and probably nearer sixty. This I know from the position in which it lay. Our canoe was a twenty-four footer; the snake's head was ten or twelve

feet beyond the bow; its tail was a good four feet beyond the stern; the centre of its body was looped up into a huge S, whose length was the length of our dugout and whose breadth was a good five feet. It is worth noting in passing that Waterton speaks of these reptiles being killed up to forty feet in length while, he says, the Spaniards of the Oroonoqui positively affirm that they grow to be seventy or even eighty feet long, and that such monsters will kill the strongest bull.

I was in the stern where I couldn't reach the rifles, so called out to Jack to shoot. He reached out for his weapon, but the noise he made in fumbling for it among the stores alarmed the snake. With one great swirl of the water that nearly wrecked us it vanished. The agility with which it moved was absolutely astounding in view of its great bulk, in striking contrast to the one we skinned. When I thought of how the latter's decapitated body had coiled round my legs and nearly broken them in the last contraction of its dying muscles I wondered what would have happened to us had that huge beast in its headlong flight taken a turn round the canoe. How utterly helpless the mightiest of men would be in the coils of such a monster!

A month had passed, and we began to think that we knew all there was to know about canoeing. Fresh indications of the presence of the savages had been seen. Twice we found bridges built over the stream by the tying together with *bejuco* of two overhanging limbs, making a crude but safe means of crossing at high water. We saw more trails, but never a sign of any dwelling-place. Sure of finding the tribe still further up-stream we pressed ahead. The going was more and more difficult as we went on. The river was high, higher than we knew.

One night we tied up as usual to an overhanging branch. After cooking supper and making a shelter, we

put back all the utensils, tools and rifles into the canoe, where they would be best protected from the universal wet by the palm-leaf covers (*armariaris* is the Upper Amazon name for them). The canoe was tied almost at our feet, as we slept heavily after the hard day's work, little suspecting the tragedy that was taking place. Hour after hour the water fell away, hour after hour the rope tightened. For a long time the stores must have resisted the gradually increasing pull of gravity as the canoe little by little approached the perpendicular, having long since reached the rope's limit. Then at last, in the small hours of the morning, everything we possessed except two machetes and a bottle half full of molasses slipped in a fateful avalanche into the water. If only we hadn't chosen the limb so carefully that night! How easily it might have given a warning crack as it bent to the strain!

When we awoke in the morning it was to gaze down on the water fifteen feet below us. Slowly the truth dawned on us. We were sixty days up-river from the nearest post, without either food or the means of getting it. At our feet lay our two blankets, and the machetes and the bottle of molasses, which by a mere fluke we had omitted to replace in the canoe, the only relic of our kit. Jack, always a philosopher, took one miserable look at the overhanging canoe, and turned away. "Holy Hell," he muttered.

It was about all there was to say. The outlook was hopeless. From that deep muddy stream we could never hope to recover a single thing. Whatever had floated was by that time miles away. Gone were our rifles, gone were our provisions, hopelessly embedded in the silt under a couple of fathoms of swiftly moving water. We thought of diving for them, and had the water been still, we might at least have secured our rifles and ammuni-

tion; but as it was, the muddy current would have swept us away long before we could ever touch bottom.

In fifteen days we could have reached the Napo had we had food, but never without it. We turned the matter over in our minds for some time. Our only hope, we concluded, lay in picking up the first trail we could find, and following it as fast as we could. We had been betrayed by that treachery which is a characteristic (would that we had only known it then!) of all the smaller tropical American rivers in the rainy season.

Barefooted, bareheaded, clothed only in cotton shirt and pants, we set off with our blankets, our machetes, and that miserable bottle of molasses.

What a hope! We had seen but three trails since entering the Yasuní and those were many miles away. Our only chance was to strike out into the woods, away from that accursed river which had robbed us of our means of supporting life.

With but one thought in our minds—to go on and on as hard as we could until our strength gave out—we pressed on through the jungle, not even marking a trail. What would have been the use, when there was no good in returning? If our salvation lay anywhere, it lay ahead. Time was the most precious thing to us in all the world. We covered the ground at a good pace, but the thorns which were everywhere gave us a great deal of trouble. At first we stopped to extract them from our feet. By the end of the first day's march, however, we became reckless of where we stepped, forging straight ahead (as we thought), caring neither for thorns or anything else. We finished the molasses bottle the first day, rinsing it out and drinking the water several times before finally throwing it away. It never ceased raining. The forest was unspeakably dismal.

The ground was one great saturated swamp, with pools of water every few yards.

When night fell, we cut a few leaves from a palm, and made a more or less clear patch on which to sleep. We huddled together in our heavy, soaking blankets, spreading over ourselves another layer of palm-leaves. In that way we gathered and imprisoned enough heat to pass a comfortable night. In the morning we were refreshed, but became aware of itching all over our bodies, partly from the multitude of scratches we received while on the march, and partly from the chafing of our wet packs. Having nothing to eat we started off again at once.

On that, the second day of the march, we were held up by a deep, swift stream. We knew that we had not struck the Yasuní once more, for the water was clear. We swam across. Taking up the march again, within half an hour we were once more held up. Believing that we were maintaining a steady course, we swam across a second time. In mid-stream we were forced to let go our blankets, which nearly bore us under in the swift current. On we went again. Our feet were nearly numb with the constant shock of thorns and tangled roots, which was a blessing, for we had no time to tend them. Our clothes were badly torn, many pieces having been ripped out by the vicious thorns with which so many of the Amazon trees are covered. It was about the middle of that second day we began to feel the effects of the lack of food.

For the third time we came upon the stream. There was nothing to do but to swim it again. On the further bank we turned up-stream. Only a few yards away we found a fresh machete mark—our own. We were standing on the spot where we had taken to the water for the second time. For the last two hours we had described a complete circle.

We sat down to think it out. Jack, whose ready wit always rose to the occasion, turned to me with that serious, quiet way of his.

"If you'd only told me you were coming back for another dip, I'd have waited for you," he said. "And I'd have saved that last lump of my shirt-tail, too."

"Which side of the stream are we on now, anyway?" I asked.

He took a good look up and down stream.

"Well," he drawled, "if I were placing a bet on it, I'd say we were on *this* side."

We turned our backs on the stream and staggered off in a new direction. It was afternoon as near as we could tell when we sat down again for another rest. We were distinctly weak. Jack fell asleep almost immediately; I remember how he sat huddled up with his back against a palm while a pool of water slowly formed in the hollow above his collar-bone as his head drooped to one side.

On the third day, the pangs of hunger had left us, but we knew that weakness would soon overcome us if we didn't eat. In desperation we chopped down a small palm and cut out the heart of the top, which is crisp and tender, like that of a head of celery. But our stomachs were in no condition to keep it down and we brought it all up almost as soon as we had swallowed it. The nausea left us weaker than ever.

The third night we managed to sleep fairly well, again with the aid of palm-leaves. We awoke on the fourth day to find that our scratches had turned septic, infected by some microbe which causes a maddening irritation. Not only that, but our skins, softened by the constant soaking, had broken out in sores like ring-worms. Our feet were a mass of festering wounds.

All that day we struggled ahead, resting more and more frequently as we grew weaker and weaker. Once we sighted a sick turkey perched a bare ten feet above the ground, an object of misery like ourselves. Jack summoned all his strength and hurled his machete at it, knocking it to the ground where we picked it up dead. Having no means of lighting a fire in that streaming wilderness, we tried to drink its blood. Jack was instantly seized with vomiting. Seeing the effect it had on him, I left it alone, attempting instead to gnaw one of its legs. The attempt failed. We gave it up as hopeless.

On again, stepping with benumbed feet. Our legs moved automatically under us. Our voices sounded hollow and unnatural, as if someone else were speaking to us. The swarming mosquitoes were only one of the many minor pests, but these we hardly heeded, preyed on as we were by the deadly serious aspect of the situation. We must have rested every hour that day. Before nightfall we were thoroughly exhausted and it was only with difficulty that we managed to lay a bed of leaves. All night the rain fell more heavily than ever.

We woke on the fifth morning in a puddle. Staggering to our feet, we started off without exchanging a word. During that morning, the last vestige of strength we had was petering out. At about mid-day we ran up against a wall of thorny bamboo thicket. The heaviest barbed wire entanglement is no worse an obstacle. Practically naked as we were, and with hardly the strength left to stand, we halted before it. My knees gave way, and I sank to the ground, heedless of Jack's entreaties "just to see what was on the other side." I muttered something about "having a sleep first" and sank into oblivion. Jack, hero that he was, attacked that

terrible fence of thorns. How he succeeded in getting through I don't know.

The next thing I knew was that he was kicking me and shouting at me:

"Get up, for God's sake, man; I've found a trail—as big as Broadway!"

CHAPTER VIII

A PHANTOM PEOPLE

We take over quarters—Convalescence—The mystery man—Rubber—The last link gone—A permanent base—Vegetarians perforce—A dollar a pound—The Mygab— Snake-bite—A peace-offering.

"WELL, anyway, I hope *that* beggar won't be at home when we turn up." Jack pointed to an enormous footmark as he spoke.

The news that he had brought me as I lay half unconscious had had a marvellous effect on the muscles of my legs. Once more they answered to my will, and I was on my feet in a moment, staggering after my companion through the gap in the thicket which he had opened with the last bit of strength that was left him. Caring nothing for the pain of our wounds which were reopened by the thorns, we burst through into that remarkable forest-highway along which we were now making. It was a clean-cut tunnel, not an inch less than five yards wide from side to side, made by those elusive men for whom we had looked so long, and made with such care, and on so large a scale as I have never seen before or since. It was as if a house had been dragged through the forest. The purpose of it I was never able to discover. It was unique, not only by reason of its breadth, but of its great length. It ran for at least a mile, dead straight for the greater part of the distance. There is only one possible explanation of its existence that occurs to me. It may have been the commencement of an exceptionally large *chacra*.

Be that as it may, the sight of it put new life into

us two. We hustled along, good for another hundred miles. There *must* be something at the end of so large and fresh a trail.

Standing out among the innumerable tracks of men, women and children with which the trail was freshly marked was that giant's footprint which had called forth Jack's comment. The first thing to decide had been whether we would "follow the crowd" or not. The great majority of the tracks ran away from the river, so we resolved to try our luck in the opposite direction, as we should be completely at the mercy of the savages wherever we found them. Turning to the right, then, we made along as fast as we could, thinking only of the food and shelter we should find.

After covering only about five hundred yards we saw, not far ahead, the unmistakable light of a clearing. A few more minutes, and we were out in the open, staring at rows of banana-plants, *yuca,* yams, sweet potatoes—all that our hearts desired. The *chacra* covered three or four acres, and in one corner stood a house, which we found after we had followed the trail through the clearing which was itself a miniature forest of cultivated plants. We came to a halt some ten yards from its gable-end, and stood gazing at what might mean for us salvation or final disaster. As we stood there, shivering in the pelting rain, we cannot have looked a very formidable pair. Surely no human being would be afraid of *us!* So thought Jack, who proposed that we should just walk in as one of the tribe, and "spar them for something to eat." I, on the other hand, thought we should let out a yell, rush the place, and hope for the best.

"Better get inside before we yell, at any rate," Jack returned, "so that they can hear us."

His view of the matter prevailing, I led the way across the few remaining yards to the house, and pulled

aside the palm leaves which covered the opening which served for a door. I entered, and found myself in the dark. Jack, who was standing by close behind with his machete, carved a gap in the wall and let in some light.

We were alone. The one-room house was some forty feet long, and half as broad. The first thing we saw was corn, the bunches of husks tied in pairs and hanging over the rafters. There were besides bunches of bananas and plantains in different stages of ripeness and baskets of wild fruits.

To give ourselves a view of the approaches to the house, we cut away each end from the level of the rafters to the ground. The house was really nothing but one big gable, whose sloping roof rested on the ground at either side. Having protected ourselves against surprise, we set about making a fire. While Jack was tinkering with the savages' fire-maker, I began to explore the smoke racks for meat. We were in no condition to eat green fruit—we needed hot, cooked food. Stepping in one of the fire-places I burned my foot. On looking among the embers, I discovered a few hot coals, which we immediately blew into a blaze. Moving the stones to the centre of the house for safety, we built up a rousing fire, and were soon parching corn and roasting plantains and arrowroot, soaking up the blessed warmth the while. What a feast was that! No need for me to enlarge on what it meant to us.

Looking round, we took stock of the interior. The roof was stuck full of spears, beautifully made from *chonta* wood and tufted with feathers from the *lumbiqui* (toucan —*Quichua*). There were piles of round earthenware brick-red pots. Stone hatchets fitted with wooden handles lay about. Paraphernalia for making fire was stowed away in a corner. Roughly made blow-guns were lying

on the cross-beams. A small quantity of *masata* was stored in one of the pots. A dozen stone fireplaces were ranged round the sides of the dwelling, each with a shelf made of small sticks suspended from the roof immediately over it. Dishes made of gourds cut in two were scattered about. There was absolutely nothing in the way of furniture, nor were there any signs of apparatus for spinning or weaving, nor even mats on the clay floor. The place was in an orderly state, just as though the inhabitants had suddenly walked out in the middle of their every-day life.

On thinking it over, we came to the conclusion that they could not have been gone more than forty-eight hours before we took possession, for that was as long as the fire could have remained alive without attention. Doubtless they had heard our firing further down the Yasuní when out hunting, and being utterly ignorant of all that pertained to the outer world, had fled from our approach. Whether they would return or not was an open question. It seemed likely that they would return some time, at any rate, to find out what had become of their homes. Thus, being absolutely unacquainted with the nature and habits of the savages, we naturally felt inclined to take as many precautions as we could against a possible visit from the rightful owners of the dwelling we had usurped. So we slept with what arms we could collect at our sides; I on a bed of spears laid from beam to beam six feet above ground, Jack by the fire with his machete and a spear at hand. To protect myself from the keen edges of the three-cornered blades which ran half the length of the spears, I covered them with several layers of that material which alone makes life possible for mankind in the Amazon basin, the leaves of the ever-present palm.

Thus we entered on the third period of our expedition.

For three weeks we lived in our new home. During all that time we were never out of sight of it, and whenever we left its shelter it was only to dig up roots from the *chacra* or collect firewood. We were in a bad way. The itching sores with which we were covered nearly drove us mad once our blood began to flow again. They had spread all over our bodies until we could scarcely bear the agony. Our feet, too, had festered with the thorns still embedded under the skin. We spent most of our time trying to dig them out with the help of the machetes, and little by little we rid ourselves of them. The suppuration (*chig-chig,* as the Quichuas say) from which we were suffering took a long time to loosen its hold on us. Our nails became loose, and watery matter exuded from under them as well as from the sores with which our feet were covered, and even from between our toes. It gave off a particularly offensive odor. Time and our own devices were the only aids to a cure we had. While we could stand the pain in our feet, bad though it was, we had to find an immediate remedy for the itching of our bodies or go crazy. It occurred to me that nothing can live beyond a certain temperature and that the microbes in our skins could be reached by heat with comparative ease. So it was that we hit on an effective means of ridding ourselves of them. We took it in turns to operate on each other, heating banana skins in the fire, and holding them on the sores long enough to raise a blister. The process was certainly painful, but we were glad enough to exchange an intolerable itch for even a burn. Of one thing we had to be careful—not to break the skin of the blister for fear of worse infection taking the place of the last.

If the savages had come back any of those days, they would have found one of us sitting astride the prostrate body of the other, solemnly torturing him with fire.

With the amazing adaptability of the human frame, our nerves became so accustomed to the treatment that toward the end it caused us no pain. On the contrary, we became jealous of our turns.

Meanwhile our feet, with constant bathing in hot water, had taken a turn for the better, and there was nothing to do but wait in patience.

We were, of course, practically naked, having used almost all the remnants of our clothes as rags. Round our necks and waists, however, still hung the bands of our cotton shirts and pants of better days from which were draped a few soiled ribbons.

Although we never saw a sign of the *infieles* during our whole period of convalescence, it is practically certain that their scouts were watching our movements all the time from the edge of the forest. In the light of my subsequent experience of those nameless unknown people, I am not surprised that we lived unmolested. They are, I think, as low in the scale of development as any living men. They live by the watercourses, but have neither canoes nor rafts, and apparently catch no fish. We never came across any trace of even the most primitive form of carpentering except their houses which, as I have said, are made by leaning saplings against a common ridge-pole supported on two posts, and thatching the simple frame-work. Their houses are always built with the gables facing east and west, a matter of superstition, I imagine, for they never let any light into them.

They wear no clothes whatever, a fact which is borne out by the absence of looms from all their houses, and by the fleeting glimpses which we caught of them from time to time, as they dashed through the forest at our approach. They belong to the Stone Age, being ignorant of the use of any metals (even gold, to Jack's disgust!). For weapons they have nothing but the spear and blow-

gun. They squat and sleep on the bare ground, even the simplest form of furniture being unknown to them. I never saw any musical instruments such as the tom-tom or reed-pipe which were known to the more advanced Jívaros.

They bury their dead singly in the forests. The corpse is interred in a sitting position, as with the ancient Incas, and a miniature house is built on it; a pot of *masata* is set on the ground over the body. Evidently they revere, or fear, the dead. One day, after we had been in the country some months and built a camp by the river, I came across a grave by the side of a trail, and out of curiosity to see at close quarters the kind of people the savages were, started to investigate. After delving a few inches I broke through the crust of dry clay which formed the lid, so to speak, of the hollow grave in which the body sat. Here was one of them at last who could not run away from me! Seeing the head, I drew it from the grave to find that the long, straight, black hair was still hanging from the skull. To keep it as a curio, I took it back to camp and hung it up inside the house. Within twenty-four hours the savages had paid a visit to the place in our absence, removed my trophy and replaced it in the grave. That was the only time they summoned up enough courage to enter our quarters. It must have been a very strong feeling that led them to overcome their terror of us.

Personal adornment, a habit so common among savage people, is, as far as I could find out, unknown to them. Neither necklaces nor any other ornaments were found by us, but so much about those people and their ways was hidden from us by their refusal to have any dealings with us that I know comparatively little about them. Most of my observations on their mode of living are necessarily mere deduction from our studies of their

houses and chacras. Their aloofness was unconquerable; it would seem that they were fugitives from the world, looking upon all men as their enemies (unless they regarded us as devils, which is not unlikely). Doubtless they had been chased into the furthest depths of their forest home by their more warlike neighbours. That they are no lovers of war is certain.

Had we been as highly trained in woodcraft as they, we might have caught one of them, and so broken the ice. As it was, we left their country without having exchanged one single word or sign. Thus it happens that my sketch of this tribe, which—doubtless like many another—lies buried in the unfathomable vastness of the forest which stretches from Colombia to the Argentine, is hopelessly incomplete.

To return to my narrative. At the end of three weeks of vegetarian diet and careful nursing, we cured ourselves completely of the results of our five days' march. Free to turn our attention to the question of prospecting the forests for rubber, we began to explore the numerous trails which led through the high country within a few miles of our headquarters. We had been left complete masters of the whole district. Surely no invading force ever had an easier victory than did we. I do not wish to convey the idea, however, that we were pleased to be left so completely alone at a time when we were still hoping to establish friendly relations with those ghost-like men, who, though everywhere, were never more than glimpsed. We were far from being convinced that we should *never* break down the barrier that their fear and superstition had built up between us.

As if to give us an idea of what the country held in store for us, Nature had planted the largest rubber tree I have ever seen on the very edge of the clearing where we lived. The rubber trees in that part of the world, the

product of which is known as *cauchouc* (*Spanish*) grow on the non-inundated lands, unlike the *seringa* which grows on the lowlands of the Lower Amazon. The former grows singly, scattered through the forest, while the latter is found more or less in groves or groups of trees covering more limited areas. The *cauchouc* trees are not worked by tapping, owing very largely to the great distances which would have to be covered to collect the same amount of milk which can be drawn from a single *seringal* (as the groves are known locally). When a man would only have to walk, say, a couple of miles to tap a hundred *seringas,* he would probably have to cover a mile for every *cauchouc* tree he found.

It follows from all this that it is not worth while working on the smaller trees, which give a small yield compared with the amount of time spent on collecting. Again, the trees, instead of being tapped, are cut down and destroyed at once, the whole of the trunk and limbs being "ringed" at short intervals and bled of the last drop of sap.

Although this is the only method which gives any practical result in the wilds, it is this same tree which has been planted and cultivated in Central America and Mexico, where of course the trees are constantly spaced for tapping and become a regular source of revenue to their owners within ten or fifteen years of being set out. The *seringa* (*hevea*) is the variety cultivated in Ceylon, Java and the Far East, being more susceptible to tapping and producing a better grade of rubber.

We never thought it worth while working on any *cauchouc* tree of under twelve to fifteen inches in diameter at the base unless it happened to be close by some larger trees which we had selected. The average good-sized paying tree has a diameter of two to three feet just above the splaying-point of the roots, and a height of

twenty to fifty feet of clear trunk before the first limbs branch. The bark on a tree of this size is from three-quarters of an inch to an inch and a half in thickness, smooth, spongy, and of a yellowish-grey colour. The rubber-milk is contained in the bark itself.

The great tree which stood at the corner of our clearing alone produced one hundred and fifty pounds of rubber, and is worth a word or two. It stood a good hundred and twenty feet high. The height from the ground to the top of the flat, sloping roots which supported the giant was ten feet. The roots of the *cauchouc* do not go deep into the earth, but spread along its surface in all directions, covering a large area—in the case of this particular tree, a circle whose radius was twice the height of the tree itself. (The trees are often located in the dense growth of the forests by searching the ground for these bright yellow roots and following them up.) The size of the roots, and the impracticability of cutting below their splaying-point, made it necessary for us to rig up a chopping-board. This we built immediately above them. A split sapling, six feet long, was inserted in a slot cut in the trunk and we chopped while standing on its flat side. It was a whole day's work for the two of us to rig up the board and fell the tree, a bite three feet high having to be made before it fell. When it began to crack, we had to run hard to get clear of the danger zone, for it brought down with it a number of smaller trees, whose branches were lashed to its own by a network of *bejuco,* and made for itself a small clearing. For twenty-four hours no further work could be done on account of the myriads of disturbed insects which swarmed everywhere.

Returning the next day, we started to "swamp out," the trunk of our *cauchouc* being scarcely visible among the tangle of vegetation, great and small, which had been

pulled down on top of it. To cut an open space round the trunk and stump, a task that was necessary in order that we might have enough room to tap for the precious milk, was the work of two more days. Then at last we commenced the real process of collecting the rubber. After clearing away the vegetation from under the trunk, we stamped a series of depressions in the clean earth, and over each of these depressions, which served the purpose of receptacles, a broad V-shaped ring or groove was cut through the bark to the wood and completely encircling the trunk of the tree, out of which streamed down the snow-white, creamy liquid in a steady flow, dripping into the depressions described. Everywhere we made these incisions, in trunk, roots, stump and limbs. At the end of a week we returned to collect the now hardened rubber. From each receptacle we dragged a great pancake, some two inches thick and two and a half feet across, while from the cuts themselves we tore the long triangular ropes which had formed as the flow came to an end. Finally we cleaned the surface of the rubber and worked it into balls by wrapping the ropes about the pancakes. In this form it is sold and shipped to market as crude "cauchou balls."

I have given this description of the way in which we tackled that great tree as being typical of the many months of work we put in up the Yasuní. In doing so I have, of course, forestalled certain events which took place shortly after the point at which I have arrived in my tale. We were not in possession of any tools or implements except our two machetes at that time, but of how we made good our deficiency I shall shortly speak.

Our investigation, made immediately after our recovery, gave such results that we decided to stay in the locality long enough to mark a good number of trees, and then to go down-river to re-equip ourselves. On this work

we spent three or four months, moving from one *chacra* to another, sleeping in the savages' shacks, which they always deserted on our arrival (a most convenient arrangement) living on the vegetables and fruits which they had planted. Finally, having discovered a good trail leading from the bank of the Yasuní to the first *chacra* we found, it seemed to us that the best thing we could do would be to build a permanent base for our future operations. This we did, and it was from the house we built there that the savages took their dead comrade's head.

The time we spent up there before returning to Andrade's post was roughly, from June to October (inclusive) 1897, according to my subsequent calculations. While we were buried alive in that wilderness, however, we kept no record how the days, weeks and months went by. It was a curious experience, that breaking of the last tie with the outer world. Time is the one common interest which those who are cut off from civilization have with those they have left behind, the Ruling Power which presides over the lives of all men in whatever dark corner of the earth they may hide themselves, an irresistible Force that all must obey. But we two, lost to the world up in that unfathomable backwater, refused, as it were, to face the inevitable. Perhaps at times we even forgot that Time was marching on. At any rate, it was a matter of complete indifference to us.

Our permanent base was a great improvement on the savages' houses. We made a small clearing, put up a raised platform with a bamboo floor, and covered the whole with a thatched roof. We built bunks of the same wood. On a temporary raft of *bálsa* logs we went downstream to look for the canoe which we had cached before starting out into the woods on foot. It was then that we found out that the distance from the spot where we lost

our stores to the *chacra* which saved our lives was something like half a day's march, given a good trail.

For fire we had the savages' apparatus, which we seldom needed, however, for we kept a fire of green logs going continuously in the cook-house. We were living comfortably enough, but the unvarying *menu* became monotonous to a degree. Conversation generally drifted round to something like the following:

"I say, Jack, if you went into a restaurant in New York to-night, what would you order?"

"Oh, I guess I'd have a dish of hot biscuits and butter, and half a dozen mince pies," etc., etc., etc.

"Well, supposing you were out in a cow-town, and drifted into a Chinese flap-jack foundry, what would you call for?"

"Ham and eggs, by George, and coffee with cream in it."

Then gradually we drifted down the culinary scale till we were discussing what each of us had seen in the garbage pails at home. Those bits of bread and pie-crust, those bones with still a bit of meat clinging to them, how we should have welcomed them then! We even carried a resolution to the effect that we should have chased them down the sewer if we had had a chance of catching them.

Only once did we find relief from the vegetable diet that was becoming so irksome. I caught a large land-tortoise in the woods, of which we had as fine a supper as any I ever remember enjoying. (I narrowly escaped one of the greatest disappointments of my life when it slipped into the river as I was preparing to cut the meat out of the shell. The reptile did not appear to like the water, however, and promptly crawled up the bank again.) In any country a land-tortoise is a delicacy. Up the Yasuní it was a Thanksgiving Feast.

In our efforts to provide ourselves with a variation from the eternal diet of plantains, bananas, yams, and *yuca,* we went off after some of that milk which Santiago had shown us how to find. After locating a tree which spouted the rich white sap we lost no time in taking a good draught. It didn't seem to taste quite as good as that we had had before, and left a slightly bitter taste in the mouth. Within a few minutes we were writhing on the ground, doubled up with pain and nausea. Jack, between groans, declared that he "felt like vomiting, and that if he'd got to that stage he must be sure bad, for he'd never done it but once in his life." After some minutes of contortions and spasmodic retching he brought up a pair of pretty little rubber balls which bounced as well as the real *cauchouc.* I, too, contributed my share.

When it was all over, Jack turned to me solemnly:

"To think that that is only worth a dollar a pound," he said, fingering one of the balls. "If I had to make it like that," he added thoughtfully, "I'd want a million an ounce and I'd only guarantee to find one ounce more—by way of speculation."

After that we left wild milk alone.

There are a dozen or more trees of which the sap is white and creamy. What we swallowed is called by the Quichua *cáuchouc-mâchan* ("the brother of rubber").

And so we existed from week to week, living in our new camp and making a trip every few days to the nearest *chacra* for a supply of vegetables. We covered a large area in our prospecting operations, coming across the trails and plantations of the savages wherever we went, but never getting more than a glimpse of their fleeing bodies through the trees. The hope of making friends with that phantom people was gradually dying within us. All the rubber we should ever get we should

have to get ourselves, and as for those gold slop-buckets . . . !

And so we worked on and on through a series of uneventful days, marking about a hundred good trees in all. Occasionally the tedium was broken by some unusual incident, of which several stand out in my memory.

Once we were digging *yuca* in a *chacra* when we came across a fine specimen of the mygale, which is indigenous to all the Amazon woods, but is rarely met with. This spider has a purple and black body two inches long and black legs. Both body and legs are heavily built and covered with thick hair. It is known to kill chickens and other birds. The Indians think that it lives on such prey entirely. That its bite is deadly poisonous I know, for I was once present when a *cauchero* died from it. In appearance it is at the same time beautiful and repulsive. The one we found was large enough to cover a breakfast plate, having a span of about eight inches, but did not display the lightning rapidity of movement which characterizes so many of the larger spiders, typically the tarantula which is barely half its size. I speared it with a sharp stick and attempted to preserve it, but the ants marched off with every scrap of its body.

Shortly before the end of that period of prospecting Jack, who had been out alone, walked into camp looking rather pale and excited, sat down, and made one of those brief utterances for which he was so noted.

"I guess it's all up with me. I'm going to cash in."

This was not the kind of thing one expected from Jack, so I was greatly concerned as to what the trouble might be. He told me that he had been bitten by a bad snake and already felt queer. The snake, he said, lay on the main trail half a mile away,where he had killed it with his machete. So I ran to the spot indicated

and hurried back with the "medicine," determined to try the drastic remedy which is supposed to effect so many cures on the Pacific slopes of the Andes. One makes the patient swallow the gall-bladder of the snake by which he has been bitten and applies a ligature to the affected limb above the bite and a hot coal to the bite itself until it is thoroughly cauterised. To our great relief he was all right in forty-eight hours, having suffered nothing worse than giddiness and bleeding at the nose and mouth. This was one of the three poisonous snakes we found during our whole time on the Yasuní; it was not over two feet in length, mottled brown, green and yellow.

At last we made up our minds to leave (some time in October, it must have been). We were satisfied that we had marked enough trees to chop out a passage to New York. So we loaded the canoe with fifteen days' supply of vegetable produce which the *"chacra"* afforded and built a stone fireplace in the bow, which served as the kitchen and smokehouse of the floating farm.

One morning, having lighted our ants' nest and put it on board, we stood ready to start. As a final attempt to establish friendly relations with the savages we left one of the machetes stuck in a tree near camp, hoping they would take it as a peace offering and, having discovered its value to them, *come back for more* when we returned.

Then we stepped on board and pushed off.

CHAPTER IX

"PASSAGE MONEY"

A Tapir—The credit system—A night visitor—More tapirs—Fine linen—Rejected—Fever—A gastric feat—The uses of rubber—Pack-ants—Dwindling supplies—Prostration.

We made good progress till a tapir smashed the canoe to matchwood.

We had covered two-thirds of the way, having left the rocks far behind and entered upon the last stretch of the Yasuní where the water was deep and slow under a cool, green canopy. The river at that time happened to be at a low level, leaving the steep clay banks high above our heads. It was perhaps fifteen feet from their tops to water-level. The dugout was high in the water, for we had eaten the greater part of our stores. The rest of our outfit (one machete) was in the woods with us where we had gone for a new pole, leaving the craft tied up under the lee of the bank.

As we made our way back through the thickets we put up a big tapir. The animal, in its blind rush for safety, dashed through the bush for the water. The tapirs, having no means of defence, always make for the water or for a bamboo thicket, whither their enemies, the jaguars cannot follow them. If one of these powerful cats has already fastened itself to the pachyderm's back, it must be either drowned or torn to pieces unless it loosens its hold.

That morning the animal happened to be directly between us and the river, so it made off in the direction of the latter the moment we disturbed it. Tearing through the undergrowth it never halted an instant on

the bank but dived headlong for the water. It landed with a crash amidships and our canoe floated off in bits. We gave thanks to Providence for endowing the bananas and yams with a specific gravity of less than 1.00. We were able to rescue them after a short swim, together with the seasoned sticks for fire-making.

It took us two or three days to rig up a temporary canoe from a "barrel" palm with *balsa* outriggers and a pair of paddles. We selected one of the largest trees we could find, but with only one machete with which to do the work, the result was a makeshift, but seaworthy craft which served its purpose well enough for the few days' journey to the Aguarica. There Andrade would be waiting for us with everything in the way of stores that we could want.

The sooner we could cover the distance the better, for as we approached nearer and nearer to the Napo the mosquitoes became a torment. Frequently we kept going all night, one taking a watch and steering the canoe while the other slept.

We were mightily glad, then, when we rounded the last bend of that ever-winding tunnel and the broad Napo lay before us shimmering in the blazing sun. It was a matter of but a few hours paddling to cross to the left bank, turn up into the gentle waters of the Aguarica, and draw up at last at Andrade's floating pier. There were not enough clothes to go round, for all that were left were a few rags clinging to the waistbands of our old pants. So Jack lent me what remained of his to supplement my own, and, feeling quite dressed-up, I stepped ashore.

To cut a long story short, Andrade put us up for a few days and we refitted on the credit system which was the basis of all business in the Amazon country in those days of booming trade. Naturally we had noth-

ing in the world with which to guarantee the old trader repayment, but there was no trouble about that kind of thing down there in 1897. We enjoyed that taste of comparative civilization to the full. It was to us what Biltmore is to the hunter who returns from the North Woods. The "airtights" appealed particularly to Jack—canned biscuits, milk, *chocolat-au-lait,* butter, and many another unheard-of luxury. Even the lady-chewed *masata* tasted good.

I took the opportunity of writing home to explain my delayed arrival but, as it turned out, the letter never reached home. Our host was supposed to post it in Iquitos.

Old Andrade displayed great interest in the outside world, of which he knew absolutely nothing; but, for the same reason as deterred so many of his type from going and seeing for themselves, the fear of starving to death through ignorance of what to ask for, he could never be persuaded to undertake a journey down to Pará and on to some part of the civilized world. He asked all sorts of questions about what happened to the rubber after it was shipped in Iquitos, being quite ignorant of the ultimate uses to which the main source of his livelihood was put. It was, of course, impossible to explain to him more than a bare fraction of the processes by which it is turned to a thousand uses.

From him we obtained a fresh canoe which turned out as a matter of fact to have seen much service. Food, pots, kettles, fishing-tackle, mosquito-bars, rifles, ammunition, a double-barrelled trade-gun, and, finally, clothes were stowed in our new "war-bags" and put on board. To Andrade's questions as to what we had found up the Yasuní and why we wanted to go back there we returned evasive answers. There wasn't a fortune to be made up there, but we could get on much better without anybody

interfering with our phantom friends. On many such isolated streams as the Yasuní *caucheros* had carried out raids and, having shot the men of some savage tribe, had carried off their women and children to be sold as slaves, a business which was common on the Amazon and quite as profitable as rubber. The stoic natures of the aborigines of those parts enabled them to adapt themselves to their new environment with perfect contentment.

Full of hope, then, we set out for our old home on the headwaters of the Yasuní, thus entering upon the fourth period of that venture, equipped with the knowledge gained on our previous passage.

We went ahead steadily, expert canoemen by this time, enjoying the luxury of sleeping peacefully under the new calico mosquito-bars, and finding a number of our old temporary camps ready for us to use again. The journey occupied between forty and fifty days in all and was on the whole uneventful except for one event of the utmost interest. A day or two after entering the river we had turned in for the night in one of the old camps built by Santiago & Co. In some way or other I kicked away the mosquito-bar and left my feet exposed. At some time during the night I was awakened by a severe twinge of pain in my big toe and, thinking that some insect had bitten or stung me, I reached for the rope of rubber which served as a lamp and struck a match and lit it. My foot was covered with blood but nothing else was to be seen. Presently I saw the cause of the trouble. A vampire bat was circling round under the roof of the shack. With the light still flaring, and myself sitting up in the bunk, the beast returned to the attack again and again, alighting on the floor at the foot of the bunk and climbing up my blanket with the aid of his wings. Naturally, I reached for my machete and floored the voracious, disgusting thing.

By courtesy of John W. Leonard, President of the Leonard Exploration Co., N. Y., Joseph H. Sinclair and Theron Wasson, geologist, N. Y.

EN VOYAGE ON THE NAPO

Photograph taken by H. E. Anthony, American Museum of Natural History

A POWERFULLY BUILT JIVARO OF THE HUAMBIZA TRIBE

In the light of the facts which I have already stated about these creatures, the behaviour of that one, the only one I ever succeeded in catching at work on a human being, was very extraordinary. I undoubtedly interrupted its operations by a coincidence and not because I was directly awakened by the operation itself. For if the latter had been the cause, I should surely have done the same thing many a time. The pain must have been caused either because the beast, in its fright, withdrew its mouth suddenly from the wound, or because in its anger, it bit me with those four sharp eye teeth which they carry. Again, another peculiar feature of the affair was the fact that even while I sat up with the light on and swung at it with my machete it returned again and again to the attack with invincible persistence, nothing short of death putting an end to the fight. It behaved, that is to say, just as these creatures always do in the case of cattle but in direct contrast with their normal behaviour in the case of men. Apparently, the shyness which they display in making an attack on a man gives place to that furious voracity which nothing can frustrate, once they have tasted their victim's blood. My own experience which I have just related is, however, the only instance of its kind which has come to my knowledge.

In such enterprises as ours there is always a strong element of luck. Once we narrowly escaped a disaster which could have caused us another serious set-back. While encamped at ease on a comfortable low sand-bar —a large one, for the Yasuní—I was sleeping in the canoe as a precaution against its breaking its moorings or being left high and dry, while Jack rested on the sand.

The canoe floated in about two feet of water. Suddenly there was a commotion in the undergrowth and three tapirs broke into the open at full speed. Awakened by the noise Jack and I did our best to head them off,

knowing that their blind rush toward us might carry on until they ran us down. We were unable to scare them in the least degree, shout and gesticulate as we might. On they came, one of them tearing through camp, another jumping over the bow of the canoe, and the third, held up at last by the spectre swathed in red calico which yelled and waved its arms at him from amidships, dived clean under the poop. He tipped the canoe up till the water poured in over the bow, but failed to swamp it completely. Like his near relation, the rhinoceros, the tapir certainly needs spectacles. He is a beast against which no precautions can be taken by reason of his gross stupidity. While by nature innocuous, his very clumsiness constitutes a danger. His tameness always provided us with the means of obtaining with great ease a supply of good meat and all the canoe-ropes we could want.

While on the subject of game, I might mention that there is much in the Amazon country which appears fat and attractive but turns out to be uneatable. For example, the *paujiles* and turkeys are often found to have eaten so much wild garlic, a tuber which abounds in those woods, that their flesh is rank with that well-known flavour which few non-Latin people can stomach.

Thinking that it must be somewhere round Christmas time we resolved to celebrate the festive season by donning some of the new clothes with which Andrade had supplied us. Accordingly we opened a box of shirts. Now, to say that those shirts were tender would be highly misleading. They were decomposed. Had we had a spatula with us we might have succeeded in lighting one out of the dozen without breaking it. As it was, we had more fun out of those shirts than has characterized many another Christmas party I have attended. They had cost us five dollars apiece.

"That's about a dollar a second, if you're careful," observed Jack.

The wet in that country destroys practically anything except wool, rubber and non-oxidizable metals, unless it be packed in airtight containers. A spoonful of salt when exposed to the air will melt before your eyes. Cotton fabrics rot away in a tenth of their natural lifetime. Cereals stowed in sacks soon sprout, while foodstuffs made with a basis of flour become green with whiskers in a few days.

In about three weeks we had left the clay banks behind and were poling over a rocky bottom. The rains were due to start any day so we put forth our full strength in order to cover the remaining stretch before finding ourselves floating among the overhanging branches. One day about a fortnight later we passed the scene of the Tragic Night and knew that, in three or four hours, we should be at our journey's end and know once and for all whether our neighbors had accepted our offer of friendship.

When we rounded the last bend the machete still stuck in the tree where we had left it, but alongside was a perfect picture of the whole implement, down to the rivet-holes in the handle. It happened that the tree in which we had left it belonged to that species whose peculiar attribute is its sleek green bark which retains in the form of clear white lines any impressions made upon it.

Reflecting on the savages' action two points seemed to stand out clearly. First, they were determined to have no dealings whatever with us. They had had their chance and deliberately allowed it to slip away. Either they feared us, or they had no desire to trade with us, or, again, their moral code was absolutely rigid on the question of property rights. Whichever of these reasons was the real one, we should never make friends with

them. Secondly, I concluded that what I had before suspected was proved to be correct, namely, that those people knew nothing whatever about freehand drawing or even the most primitive form of caligraphy. I never saw any other mark or sign of any kind on tree, stone, or earthenware pot. Surely, I argued, if they had known how to convey anything by writing or by signs they would have left some sort of message for us on that tree. Instead, they simply placed our machete against it and traced its outline with a sharp stone. Jack gave a disdainful glance in the direction of the tree and summed up the situation in characteristic style:

"They glimmed it, handled it, drew it, and—"beat it," he growled.

We settled down to the task of collecting our passage money for that problematical voyage to New York. But no sooner had we started than I was attacked by one of the greatest enemies of the *cauchero,* the fever. One day without any warning I began to shake. I shook till I felt that my teeth would drop out with the vibration. My knees gave way, and I lay on the ground hugging myself to keep myself together, the muscles of my face aching with the effort to stop my jaw rattling. Every bone and muscle in my body ached as if it were breaking in two. After running its natural course, the shaking gave place, as in the case of common malaria, to an attack of sweating which soaked my clothes from head to foot and made them so ill-smelling that they had to be hung up out of camp until washed.

Week after week, month after month, the fever returned as regularly as clockwork every other day at about eleven o'clock in the morning. If I was in camp at the time I used to lie down on my blanket while Jack sat on my back "to keep me from meandering all over the landscape," as he put it. When on the trail or at

work I would just lie down wherever I happened to be and shake out my regulation twenty minutes. What with the time occupied by recovering from the extreme exhaustion which the quaking left behind it, I lost an hour every other day for one whole year. After several months of it, Jack turned to me one day.

"You've sure missed your calling," he said; "you'd have made your fortune shaking down Brazil nuts."

I worked on, however, hoping all the time for the day to come when I should be acclimated. But it never came. I became thinner and thinner, and the only thing that flourished was my beard. Jack, too, by the way, had a fine growth which he used to lop off square with his machete, using a post as a chopping-block. We must have looked a comic pair with a square hole left in our beards for eating.

It is once more impossible for me to give any chronological account of our life in the orchid-laden forests of the Yusaní. Our second visit to the headwaters of that river was just one long year of chopping, packing, hunting, cooking and shaking. The period covered was roughly the whole of the year 1897, but again we lost count of time. It mattered little to us whether it was the day before yesterday or to-morrow. Gradually the pile of rubber in the little clearing before our shack grew to quite formidable proportions. We could tell within a dollar's worth how much we had. Our improvised scales were made up of a plain wooden balance to one end of which we attached a five-gallon oil can full of water whose weight we could of course calculate at the rate of eight and one-third pounds per gallon.

Month after month passed by, the monotony broken from time to time by some new discovery. I venture the assertion that it would take the greater part of a man's life to learn all the secrets of those forests. When

he first enters them, trees are either rubber trees or merely trees, the movements of their branches nothing more than movements, the tracks which pass between them denote nothing but the mere passage of some animal. The multitudinous voices of the woods carry no special message to his ear.

Little by little the inner meanings of things unfold themselves to him. But never can he hope to acquire the wonderful knowledge which is the very essence of their existence for those who are born and bred in a world which is itself one boundless forest. In every tree they see a blow-gun, a shelter, an essential drug, or a meal in the making. Each track—perhaps nothing more than a disturbed leaf—is for them a sign-post. A distant noise may mean for them that the *maquisapas* have found a fruit tree or that the *cotos* have settled for the night and will be an easy prey for their poisoned arrows. In a word, their knowledge of the world in which they pass their lives, a world stored with the complex gifts of Nature but simple enough by comparison with ours, is complete in every detail. Without that knowledge they could not survive.

Of all the mysteries of the Amazon which I ever probed, the one which one day I solved, there in those woods, is perhaps the strangest. While out hunting on the trail, I was attracted by a peculiar movement among the shorter growth, and turned aside to investigate its origin. Approaching noislessly, I concealed myself among the verdure within a few yards and waited for a glimpse of whatever creature it might be. Suddenly, ten feet above the ground there came into view a long thin neck surmounted by a head with a pair of horns (or tusks perhaps) which swayed from side to side as if in search of prey. The horns, however, instead of rising from the crown of the head, projected sideways. "If

this is its neck," I thought, "what will its body be like"? And then there flashed through my mind a possible solution. "The *Diplodocus* at last"!

As I watched for the beast to expose its body, its neck lurched forward and it hooked its horns among the tangled vines which clung to the tree. The neck withdrew, slowly and gracefully, leaving what I had taken to be the animal's head suspended from the vines, the putrid skin sticking to the skull from which there still hung two or three vertebrae. Then it was that I recognized the phenomenon which I had come across once or twice before, the head of a deer hanging from a tree. How such an animal could ever climb a tree had appeared an insoluble problem until that day. The anaconda—for such it was—after ridding itself of that portion of its prey which it could not swallow, withdrew slowly to find a spot where it could sleep off its meal in peace.

Apparently these reptiles, although they have been known to swallow large animals, cannot negotiate the head of a spike-horn deer so, in order not to be deprived of so toothsome a morsel, they swallow the body and wait until they can break off the half-rotten head from the partly digested trunk. That they must wait a considerable length of time before they can accomplish this feat is certain, for the head of which I saw that anaconda rid itself was already in an advanced stage of decomposition. Afterwards I learned from the Indians that what I had seen was a commonplace event in the forest.

When we wanted to rest from our labors in the woods we used to bring into camp a can of fresh rubber-milk and set to work to make something to add to the few necessities and comforts we had—a new tobacco-pouch, a waterproof sheet, a pair of shoes, an air

pillow, or a few candles. Its uses are legion. For patching clothes there is nothing like it; a seam of rubber is far stronger than any thread, or indeed than the cloth itself. In the soaking woods one can pack a perfectly efficient temporary waterproof shelter with ease—an ordinary cotton sheet painted on one side with the pure milk. For canoeing, where one is exposed to the baking sun, a similar sheet can be used without fear of it becoming sticky if the milk has been mixed with common gunpowder before painting, a process which turns the sheet black. The resiliency of absolutely pure rubber (a thing which is rarely found outside the woods) is astounding. A piece can be stretched to ten or even twenty times its length, and will return to its original state. Although perfectly fitting shoes can be made easily and quickly, it is impossible to use them continuously as they scald the feet so soon and expose them to infection. They are made by simply dipping the foot into a pail of milk. Ten minutes after the foot is withdrawn the rubber is dry. By repetition of the same process, a further thickness is added, and so on until the required strength is obtained, the last few drippings being confined to the soles. They are then peeled from the feet (every hair being removed in the process) and are ready for use. They are principally useful for walking over a patch of especially thorny ground, for their elasticity makes them proof against any point however sharp. We provided ourselves with light by daubing both sides of a palm leaf and rolling it into a rope while still wet. The result makes a good, slow-burning, though not very pleasant-smelling torch.

But there is one thing in the woods against which rubber is not proof. We awoke one morning to find that we had been visited during the night by a swarm of "pack-ants" of the common red variety. They had worked

away silently for hours, cutting holes in our mosquito-bars, a Panama hat of Jacks, and even our rubber kit-bags, each ant packing off all it could carry of one thing or the other—an irregular piece severed by its scissor-like cutters. Of Jack's hat all we saw when we rose in the morning was a pair of ants fighting for possession of the last half-inch. Across our little clearing and up a tree went a procession of those citizens of a perfect socialistic state, each one carrying his Red Flag, so recently a part of our precious mosquito-bars which lost about two feet all round the bottom. The kit-bags we found to have been cut in places, but the extreme toughness of the material prevented the marauders from actually removing any pieces. However, their having been able to make any impression on them at all was proof of the ants' prodigious strength. The holes were easily patched, of course, with fresh milk.

Speaking of the devices by which we made life easier in the woods reminds me of a process I invented for fire-making which proved more than ordinarily useful in view of the great difficulty of keeping matches dry. It may be that others who go off into the wilds will find it equally practical. We would collect some dry moss from the underside of a palm leaf (a dry cotton rag would serve the same purpose) and wind it about the point of a machete; having sprinkled it with gunpowder and placed a cap on the point of the blade, a sharp rap with a stone on the cap would set the powder off and ignite the moss.

There came a time when the supply of roots in the nearest Indian *chacra* gave out and we turned our attention to a much larger one some four or five miles from camp. But here we were disappointed, for the owners had harvested everything that grew there and replanted the place with fresh cuttings. That was a serious thing

for us, for there was no other *chacra* within a good day's march and if we were to bring any further supplies of vegetables into camp we should have no time left for real work. About the same time the sugar had gone and the molasses was dwindling; when there was only a gallon left we began to suspect each other of taking more than a fair share. So we divided up what was left in equal parts and took one each. In a few more days I saw the bottom of my tin, upon which Jack, not wishing to outlast me, finished all he had at one draught. So ended the last of our sweets. But that was only the beginning of trouble. The tobacco gave out. Jack, a non-smoker, was unaffected by what was for me a real tragedy. So keenly did I feel the loss that not once nor twice I spent whole days, tramping off to distant spots where we had worked, in the hope of finding some old fag-ends. I might have known better—indeed I probably did, but tried to persuade myself to the contrary. So I was reduced to smoking banana leaves, which, though a poor imitation of the real thing, did something to help me forget the misery of the fever and the monotony of our diet. Day by day our *menu* became more and more restricted, tending gradually toward nothing but rice—finding its own level, so to speak. There were no fish in the stream near camp, for the water was too swift for their liking. Of game we had a varying supply: it seemed that many of the beasts and birds came and went by seasons, moving, no doubt, to fresh hunting-grounds when they had exhausted the supply of food. Time and again we turned for solace to our library, a yellow-back, twenty-page, United States Government pamphlet on Corn-stalk Disease of Cattle. I have always been at a loss for an explanation as to how it happened, but somehow it found its way from Quito up the Yasuní, folded in an old shirt perhaps. I think I must have picked it up when I

went down to Andrade's place the second time. At any rate to this day I can quote from its pages: "This prevalent disease traces its origin to the smut on the corn-stalks," etc., etc.

One day while we were packing a load of rubber back to camp we came across an ant-eater shambling along near the trail. We shot it, hoping to find relief from the eternal boiled rice which was rapidly becoming nauseating.

Apparently that particular animal made a specialty of *black* ants, for we found about a quart of them in its stomach. But what interested us was its meat. It looked tough, but gave off no unpleasant odour. Within half an hour after putting it in the boiling-pot the flesh all fell to pieces. However, being hungry, we each ate a good portion. In a few minutes we were both as sick as could be. The effects of that meal left Jack the same day but I was not so fortunate. I became really ill and was on my back for days, delirious much of the time. When I seemed to be getting better, the canoe broke its moorings at high water and started for the Napo without us. It seemed by that time we were destined to pass through one trouble only to strike another, for that was the commencement of the worst twenty-four hours I ever spent on the Yasuní.

Jack dived in to save the dugout and they were both swept out of sight. After waiting impatiently till dark for him to return, I began to despair as the night hours succeeded one another without a sound or a sight of my companion. Finally, I gave him up as drowned, and, taking a torch, I tried to follow the bank in search of his dead body. In my fevered condition I could have done little or nothing in any case, but it was impossible to sit still. When morning light came, but still no Jack, I began to appreciate to the full the loneliness of that

gloomy forest. My illness helped to plunge me deeper still in depression, until my frame of mind was one of absolute hatred of that dismal wilderness. As the morning wore on I commenced planning, as I lay exhausted in my bunk, how to build a craft that would take me and my half-ton of rubber away from that God-forsaken spot. Even if I were too weak to hunt, there would be just enough rice to see me through.

In the early afternoon a well-known song came floating down-river to my disbelieving ears. Was this the beginning of madness or only some passing hallucination? Whatever it was, it was intolerable. Poor old Jack, probably floating fifteen or twenty miles down-stream * * *.

Jack walked in.

CHAPTER X

HIGHWAY ROBBERY

A mixed diet—A land-crab—A theft—Repayment with interest—
We dress up—A steamer— The American engineer.

We would go to Iquitos. Of that there was no more doubt. I was no good for any more hard work. I could not pack myself along the trail, never mind rubber. A life which we had endured so long had become intolerable. Where we had been able to laugh, we could no longer smile. The pile of rubber looked like a passage to New York at least. For me New York spelt family and friends, and for Jack hot biscuits and butter!

The canoe had been recovered. After a battle with the current, in which he had no paddle to help him, Jack had floated ashore on the left bank. How to get back exercised his mind for some time, but at last, giving it up as hopeless, he had set off on foot to find a spot where he could swim across and so work up the right bank to camp. But night overtook him, and he lost his way in the dark, being compelled to sleep till dawn in his naked condition in the woods. Next day, he struck the river above camp and made his way home as quickly as he could by one of our trails. After a few days, when the effects of the ant-eater had worn off a little, I went down-river with him, and we fetched up the dugout.

We lost no time, then in stowing the rubber and the rest of my belongings on board, and pushed off.

That trip was characterized for the first ten days by one thing only—the struggle to keep ourselves in food. The stores we had brought up from Archidona being very nearly exhausted, we had to rely on the very sketchy

supply of odds and ends which chance threw in our way. Once or twice they were worth having. We found, I remember, a rarity for those woods, the nest of a *yungaruru* with eight eggs. The eggs of this bird are sky-blue and larger than a hen's, and they make excellent eating. At times we gathered the fruit from a *chonta* palm, a yellow mealy fruit, of the texture and (more or less) the taste of a roast chestnut. It is, by the way, the wood of this giant plant which is used by many of the Upper Amazon tribes for the making of blow-guns and spears.

At last we reached a backwater full of *pañas,* and our gastronomical troubles were over.

One night, by way of a change, we had a good laugh. I was awakened by a curious half-moaning, half-hissing sound, like a phonograph running down. Presently I distinguished the origin of the noise. Jack was muttering through his teeth from the other side of the hut. By dint of careful attention to the strange sounds he uttered I made out the words which he was repeating in an ever-increasing agony.

"For Gawd's sake light the light," he groaned.

Roused to action by his strained appeal, I did as I was asked. Lifting his mosquito-bar, I let the torch-light fall on his bed. A land crab sat on his face.

It is not to be wondered at that he was afraid to move a muscle. It might have been a scorpion, a big spider, a centipede, or one of many other venomous crawling things that are always to be found round camp in tropical America. Nobody ever puts anything on without first investigating it thoroughly. If you want to avoid trouble, put a hot coal in your shoes before your feet, and turn your shirt and pants inside out before trusting your limbs to them.

We were within three or four days' paddling of the

mouth of the river when we landed one afternoon to make *armariaris* for the canoe, as we should soon be out in the sunlight. Tying up to a branch as usual, we went into the forest with only our rifles and machetes. After a couple of hours' absence, we returned to the river. Of the twenty-odd balls of rubber we had brought down with us, three were left.

That was the worst shock we ever suffered on the Yasuní. The presence of any other civilized beings on its waters would have been the last thing to occur to us. During our year's absence evidently someone had not been idle. Doubtless we had removed the "hoodoo" from the Yasuní ourselves and others had ventured to follow in our wake. The first thing that occurred to us was to seize our paddles, and go down-stream as fast as we could to recover the dearly won fruits of a year's labor. Our feelings may be imagined. We were on the war-path.

Two hours' paddling brought us in sight of an old Ecuadorian and his daughter who with a canoe-load of Indians were encamped on the bank. Of them we made inquiries, and learned that a party of Colombians (the name did not evoke pleasant memories) had passed going *up-stream* the day before, but had not returned. Now the Yasuní is a very narrow river, so we turned our canoe about. Having begged a basket of *farina,* we thanked the old man for his information and set off after the thieves.

Within twenty-four hours we sighted smoke ahead. Rounding a bend we came upon an inlet from which it was rising. After landing we cautiously approached the camp, which stood well back from the water's edge. We walked up to the edge of the clearing and were met by three Indian women of the blouse-and-skirt variety, evidently belonging to some party of *caucheros.* They had

come, they said, from the Aguarica. While we were talking to them, up came a tough-looking, bearded fellow of the renegade type. I held him up and disarmed him before he could recover from his surprise. Seeing another rifle and a trade-gun hanging in the shack, I took possession of them also, and, leaving the *cauchero* thanking his lucky stars that he had escaped the penalty that was his due, I turned to join Jack at the water's edge. He had found our rubber afloat in a canoe, and a good deal more besides, and when I came up he said he "didn't feel much like sorting out what was ours and what was theirs."

By this time a second Colombian had drifted in, but he did not look very dangerous, armed only with a machete as he was. Before pushing off, we gave them a few words of advice about coming up the Yasuní again, Jack putting in a particularly fine performance in English. We intimated to them that if we saw them in the woods we should probably mistake them for monkeys.

And so it happened that some days later we sailed out into the Napo with two canoes and about a ton of rubber, having left a rifle and a trade-gun with the Ecuadorian for his information and his *farina*. We did not profess to be saints, but we thought the old man deserved something for his trouble.

After the gloom of the forest, the glare of the sun and its reflection on the water tormented us. Our scanty clothes (mere rags by this time) gave us no protection and we were badly burned. Jack suffered more than I; he peeled off three or four skins during the fortnight which elapsed before we arrived at the Marañon. The mosquitoes and gnats were maddening too. Then we decided to travel by night, and sleep in the canoe by watches during the day. But though we escaped the sun nothing we could do was of any avail against the insects which swarmed in clouds by day and by night.

Sometimes they settled on our bodies in such numbers that a black smear—a substance which might be termed mosquito-paste—would be left on the hand after passing it quickly over the skin.

At first we tried landing at night, and it was then that I discovered a blanket vein of semi-anthracite coal, four feet thick, which formed part of the bank of the river. It burned well and left a clean white ash, and indeed, appeared to me to be a good quality of high-grade. fuel—just the thing needed for the swarms of steamers which then plied the main rivers and had either to pay outrageous prices for the English or American product or stop twice a day to chop wood.

The continuous hum of the mosquitoes' wings was like a distant train passing in the stillness of the night. As a final effort to keep out the sun and gnats, we landed and proceeded to carve out suits of clothes from the red calico mosquito-bars, joining the seams with rubber; spreading the material on the sand, we took our machetes and tried our hands at tailoring with lamentable results. Jack's pattern would have done for the old times when they wore skin-tight breeches, but not for the work we had to do. He found that he could not sit down and had to walk stiff-legged; the only way he could board the canoe was by rolling in. In desperation, he slit the outside seams and pasted in remnants to fill up the gaps, every one of which stuck to his hairy legs. He vowed that had he had all those pieces he saw "climbing a tree up the Yasuní" he would have made his shirt meet his pants. The matter was not so serious as it might have been, however, for his skin was burned to a shade that matched the calico.

Back in the canoes again, we made for the Marañon.

A day or two later we were floating along when of a sudden I saw something I had not seen since leaving

Guayaquil on the Pacific—a real steamboat. We started paddling for the bank where the steamer was moored for fuel chopping to make inquiries as to how far it was to Iquitos. As we drew alongside I noticed that the hands who were on deck began peering at us over the rail with a great display of interest.

Presently the owner of the craft, a wealthy Peruvian *cauchero,* put his head over the side and, without forgetting the inborn etiquette of his race, he called out:

"I thought you were Indians at first, but now I see I'm mistaken."

"You're right," I shouted. "We're Americans."

At that he invited us on board, saying that there was one of our countrymen with him, the engineer in fact. We tied up and clambered on to the deck.

The first thing that struck Jack's eye was a crust of bread on the deck. To create a diversion he fell on it as a Rugby footballer throws himself on the ball.

Don Juan Abelardo Morey turned to the nearest sailor and ordered food to be brought up, scandalized, like a true Spaniard, at the joke.

But without waiting for the food I asked where the American was to be found.

"Down that hatchway over there," replied Don Juan.

We stuck our heads over the grating and called out, "Hello there, down below!"

The engineer looked up from his work. I think he began to answer us, but in a moment he changed his mind, and came running up the companionway, afraid, as he told me afterwards, that we might escape before he could get another look at us.

Arrived on deck he collapsed. Here was somebody with a sense of humour at last! He rolled about, spluttering and coughing—quite inarticulate with laughter.

At last our host's solemnity broke down and he, too, doubled up.

To the engineer's fitful questions I answered that we had left Quito some two years back en route for New York but had been detained up-river.

"But how far's Iquitos?" I asked. "That's much more important than New York for the moment."

"Five or six day's paddling; but if you'll only go straight to New York you'll make your fortunes," came the answer.

When first we looked into a mirror, a few minutes later, we were even surprised ourselves. Two years without a hair-cut or a shave had left their mark, to which we had added our home-made clothes. The net result was a pair of haggard, barefoot, shaggy Rip van Winkles in red calico.

Don Juan rose to the occasion. Our tale of woe moved him to bring out every good thing there was to eat on board that ship—canned sausages, Edam cheese, crackers, sugar biscuits, beer, and a host of other things I have forgotten. Best of all was a loaf of real bread, a thing we had not tasted since leaving Quito.

To cut a long story short, they did all they could for us on that steamer, giving us the food and clothes we needed so badly. As we climbed on board our canoe an hour later, the engineer made us promise to wait for him in Iquitos where he would return in a few weeks' time.

"You're the fellows I want to know," he called out to us as we pushed off; and then, as a final piece of advice:

"Go and see Dr. King."

We made Iquitos in six days.

CHAPTER XI

IQUITOS

Mud and bamboo—A letter—We sell out—Tropical medicine—Mosquitoes—William Game—A bird which sings at night—The mention of gold.

Iquitos sprang from the necessity for a receiving and distributing centre for rubber and merchandise respectively for the Upper Amazon system, corresponding to Manaos and Pará for the Lower. It was composed for all practical purposes, like so many riverside towns, of one long street with its one- and occasional two-story *adobe* (mud) houses with corrugated iron roofs (how unromantic!) in which were to be found the offices and warehouses of the local branches of American and European houses, and for the rest, a number of lazy and careless side-streets where lived the native population of *cholas* and Indians (canoemen and rubber-workers) and peruvian *caucheros*.

The houses in these back-streets were built of laced bamboo with thatched roofs; the walls were transparent in places, their only virtues being their coolness, cleanliness and cheapness. Telegraphs, telephones, sewers, electric light, ice-plants and pavements were refinements of civilization which had not yet penetrated into this community. Water was carried from springs along the river-front in earthernware jars by the native servants. The town sprang up like a "boom town" in the West, doomed to exist only as long as the commercial possibilities of which it was born should last. When I was there the population must have numbered about three thousand; later it grew to be a town of 20,000 inhabi-

tants. To-day it is again the home of a handful of natives.

The town is fifteen days in a twin-screw steamer from Parâ, some 2,500 miles. It is situated near the junction of several big tributary rivers, by which the rubber used to be brought down to the main stream from the camps, its site marking the limit of practical navigation for ocean-going steamers all the year round. In the year 1900 Captain Todd of the gunboat *Wilmington,* U.S.N., stated in his official report of his cruise up the Amazon that the average depth in the rainy season from Iquitos to the sea is 120 feet.

With our two canoes lashed together so as to form a raft, we paddled into Iquitos at midnight on the 27th, December, 1898, after wending our way through a network of backwaters from San Juan, a village near the mouth of the Napo, where we picked up a couple of Indian guides.

Even as we were covering those last few miles, Messrs. P. Mourraille and Hno. of Pará were writing to my home in Elmira one of the many letters written from various places between Guayaquil and Pará during my "year of wandering in the wilderness" which attempted to put my family on my track. Here is what they wrote:

Pará, Dec. 24th, 1898.

Madame.

Your favour of the 31st. October is in our hands, and we regret not being able to give you any further news of your son, who is 3,000 miles away from this city; but he will surely receive any letters you send him to the care of Mr. Elias Andrade.

For more safety, you might put your letter under a second cover addressed to Messrs. Marius and Levy, Iquitos, Peru, via Pará, Brazil. They are in Iquitos, the agents of Mr. Andrade, who lives on the River Napo.

We are, Madame, yours respectfully,

P. Mourraille and Hno.

Although we were unshod, unhatted and unshorn, we felt that we had climbed the social ladder at least one rung when we cast aside our red calico dungarees in favor of the more usual attire supplied us by the man who called himself Morse.

So we were not ashamed to call on the first rubber-merchants we found, Messrs. Marius and Levy, and dispose of our cargo. Having frustrated these gentlemen's attempts to "short-weight" us, we brought a cart round to carry our money away. It weighed 120 lbs. There was no paper money in Iquitos. Silver was the only circulating medium. It was the custom to go shopping with a wheel-barrow.

There was a German-American barber who had just established himself in that God-forsaken town, the El Dorado of the Upper Amazon, for reasons best known to himself. The sight of a pair of be-whiskered tramps walking down the street, citizens of his adopted country, excited him to make us an offer of a free hair-cut—we, who had just sold two tons of rubber and were wondering what we could do with so much money! We had our two-year-old beards and flowing locks trimmed, however, and turned our attention to the boot-shops, but bootless we were destined to remain, for Jack failed to find a pair that were big enough for him in the whole town, and I, if I had persisted in the effort to accustom myself to having my feet enclosed in leather after so long a period of freedom, should have reduced them to a state of complete unserviceableness. And so we found our way to a hotel—the Hotel Roma—and, feeling like a pair of lost souls being admitted into the Gates of Paradise, we were shown a room with beds in it. Beds, after two years of sand, mud, trees, and at best palm-leaves to sleep on, were something of a novelty. I have no doubt that they were in reality exceedingly inferior beds,

but they, at any rate, possessed all the outstanding features common to the species. Next day I wrote home, for the third time since leaving Quito. Such opportunities were rarities in that country. The letter, unlike its predecessors, duly arrived about two months later.

We soon changed our quarters and, although we continued to eat at the hotel, went to "bunk" with Dr. King, having taken the last bit of advice that Morse hurled at us over the steamboat's taffrail. Dr. King was an enthusiastic American, to say the least of it. Nobody dared open his mouth in his presence with any reference to things American; there was no knowing what the result might be. The doctor made Vesuvius look like an iceburg. From him we gleaned some interesting information.

Round the walls of his smoking-room were hung pictures of war. Attracted by their startling appearance, we were moved to ask him about them, with the result that we learned that the Spanish-American War had been declared, fought and won. The discovery came as a great shock and a keen disappointment, for, had we been in touch with civilization, our history might have been very different. Even Andrade had made no mention of the outstanding event of the years 1897-8.

During our stay with the Doctor we had some amusing times. Iquitos contained so much human driftwood that there was ever some new freak to be met, with a strange tale to tell and a still stranger outlook on life. Our host himself was no exception. Having reached Iquitos goodness knows how, and the devil only knows whence, on a patent-medicine selling tour, he had decided that as far as Iquitos was concerned, patent-medicines wouldn't go down, but that it was a mighty easy thing to pull other people's teeth out. So he set to work and manufactured a range of diplomas and certificates bearing witness to his

proven skill as a dentist, decorated his house with them, and invited the public to try their luck. (This was all divulged to us once in a moment of semi-unconsciousness, during which he thought himself about to die.)

His friend and associate was a certain Dr. Kelly. The latter might possibly, by a stretch of the imagination, have been a brakeman on a freight-train, but was certainly never anything more before he struck Iquitos. That place must have had some mysterious power of working on men's imaginations, for Kelly—if his name was such—no sooner arrived than he put up a brass plate on his door and started to work up a practice. He used to come to "Doctor" King to hold consultations about the different cases. Their diagnoses, would, if recorded, form an interesting study.

I remember one particularly serious case. There was a wretched individual who had been on the point of death for days, and these two could make nothing of the case. Finally the patient worn out by fever and the attentions of the "Doctors" went to a better land. Kelly drew King aside and discussed the question of the certificate that had to be issued. "Look here," he said, "We'll put down that he died owing to a congestion of the elementary canal between the gall-bladder and the lungs, causing the cold bile to rise and cake round the heart," And it was so.

Evidently the prospect of losing further important patients, and thereby running the risk of his professional skill being impeached by the ignorant masses, caused him to give up his fine practice, for he shortly took down his brass plate and accepted an invitation to become engineer on a 12 h.p. steam-propelled "scow" (and flat-bottomed at that), plying between Iquitos and an adjacent Seringal more or less on the dividing-line between the Seringa and *cauchouc* territory. Here he was, no doubt, more at home,

for he had more spare time for spinning the yarns for which he was famous.

I remember one particularly lurid tale of his. He had been up some stream in a canoe, and on the return journey he was alone; suddenly he found himself in a zone which was so full of *tigres* (the Amazonian name for pumas), that he was pursued by an unending chain of them on both banks, the smallest of them ten feet long, all roaring and baring their fangs at him, so that it was impossible to land for three days and three nights. It was commonly thought that he must have shipped a case of Scotch in that canoe of his, if he ever went at all.

The last chapter in our aquaintance with him was dramatic to a degree. On one of his trips down-stream with that American-owned 12 h.p. stern-wheeler, of which he was in charge, he carried his crew of two Cocamas and his boat-load of rubber, past Iquitos, having decided to face the world again. He didn't stop till he reached Manaos, where he sold out the rubber for cash, obtained a cargo of trade-goods on the credit system, and pushed off down-stream again. That was where his luck held out, because if anybody interested in the deal had seen him starting *down*-stream with the trade-goods, they might have asked some awkward questions. Arrived at Pará, Kelly sold the steamer plus the trade-goods and promptly disappeared.

The American owners arrived shortly afterwards in Iquitos, and were forced to the conclusion that those famous jaguars must have prevented "Captain Tom" (he had dropped "Doctor" and adopted "Captain" by then) from landing at any point in the three thousand odd miles between their plantation and the sea.

And so time went on, while Jack and I awaited Morse's return before booking a passage to New York. The ocean-going steamers, principally the Booth line, tied up

every fortnight, direct from Liverpool, their arrivals constituting the chief event of the town's life. There were a good many other boats in those days, tramp steamers that called in to try and pick up a freight of rubber, which, together with the ocean-going vessels formed the only means of communication with the outer world. There was also a regular line of river-steamers between Iquitos and Pará, and a cable between Pará and Manaos which was, however, nearly always broken down.

One day a river boat from Manaos arrived. It brought with it William Game, an Irishman of good family. He had settled in the Argentine some years before. Blue-eyed, ruddy-cheeked, big-limbed, strong as an ox, he was always ready for a fight or a frolic. Absolutely fearless, he put his faith in his right hand. None of us knew what possessed him to come up to Iquitos of all places. Certain it is that he had to leave the Argentine on account of a difference with the Governor of Punta Arenas, a coaling station in the Straits of Magellan. Punta Arenas was reputed to be the toughest town on the face of the earth at that time, so Game found himself at home in Iquitos where no questions were asked. In the absence of a police force every man was taken on his "face value." and "carved" out his own career. We ran into Game the first day he was ashore, just about the same time as our new friend Morse returned from his up-river trip, having handed over to the owner the boat whose engines he had been trying out.

Edward Morse, of Wilkes-Barre, Pennsylvania, had, curiously enough, arrived in Iquitos in much the same way as I had.

Moved by what impulse I do not know, he took passage aboard a tramp-steamer in New York which was bound for the Pacific coast of South America, via the Straits of Magellan. In the Straits his ship was

wrecked by striking a rock but the crew and the only passenger, Morse, escaped with their lives by throwing all the cargo overboard and floating the boat. They put in at some Chilian port for repairs, where Morse left the ship and gradually worked his way up to Cuzco, the old Inca capital of King Atehualpa. There he met a fellow by the name of Kirby, a well-known traveller in South America. Together they decided to attempt much the same kind of journey as Jack Rouse and I undertook. Their route across the continent lay down the Urubamba and the Ucayali into the Marañon and on to Iquitos from the South side. After many adventures, including the loss of their canoe and everything they possessed, even the clothes they wore, they were picked up off a raft by the Vaca-Diaz Expedition at the mouth of the Mischagua River. Morse accompanied this expedition into Bolivia and returning to the Urubamba, arrived in Iquitos in 1894.

Morse, aside from being known to everybody in Iquitos, was likewise initiated into all the mysteries of the Amazon. He also had the average Yankee genius for things mechanical, so that when Don Juan Morey, who had just received a steel steamboat from Europe in sections, was looking for a man to put it together for him, he engaged my friend to do the work and carry out the necessary tests. It was while out on this trial trip that he was accosted by Jack and myself on the lower reaches of the Napo.

The similarity of our temperaments and the taste for adventure which we shared, drew Morse and myself together from our first meeting. Before we had been together very long, I discovered that he was moved by the same spirit which impelled Cecil Rhodes; he was, like the great English Empire-builder, obsessed by the possibilities of the vast virgin territory which was calling

for men to develop its unlimited resources. Schemes for hewing down the forests, clearing great tracts of rich soil, building roads and railways, planting, mining, ranching—one after another they passed through his brain.

He used to write the most wonderful description of the country and what could be done with it, in an endeavour to raise enough money to start its conquest. And, after all, as it turned out, there was a great deal in what we used to ridicule.

Finally, there was "Ambusha." In the Jívaro dialect *ambusha* means, "a bird which sings at night." He earned the name by his habit of incessantly grinding his teeth while asleep. It was given him by the Indians—an astonishingly happy simile for so simple a people to strike. He called himself Charles Pope, stated that he was an American citizen of Austrian birth, spoke French, English and half a dozen languages that sounded like a nutmeg-grater, and had an enormous appreciation of his own accomplishments. It was this latter side to his character that was so dangerous, as we afterwards learned, for he believed so implicitly in his own prowess in woodcraft, cooking, and other campaigning accomplishments that he frequently led us into dilemmas (both geographical and gastric) from which we escaped only by exercising the greatest care.

Now, the close association of four such characters as Rouse, Game, Morse and myself, in such an environment as Iquitos, was bound to end in something startling, Having written home and made my peace with my family, the idea of returning to city life gradually faded before the infinitely more attractive prospect of some get-rich-quick adventure in the wilds of the Amazon, an idea which was fanned into greater activity by the influence of my companions. We had all drifted together more and more as the days went by, and little by little it

became a recognized fact that we would promote an expedition up into the unknown territory on the head waters of the parent streams of the Amazon. I had already forgotten the horrors of fever under the influence of quinine, of which I began to take enormous doses the moment I arrived in Iquitos. A hundred grains a day for a week or ten days put me right, and I have never had a serious return of the trouble since. A little good food, too, drove from my mind the memories of all the lean months through which Jack and I had existed.

Then somebody mentioned the Inca Gold. That was the spark which fired the fuse. Under the influence of Jack's rhetoric the final decision was made. We would go and find the source from which the old Lords of South America, whose dual kingdom overlooked the valleys which we were going to explore, drew their wealth.

Jack's theory sounded plausible enough to our ready ears. He argued that as the Andes and the Pacific coast had been civilized and prospected for a hundred years and no gold-quartz mines had ever been found, the only other source from which the ancient Incas could have obtained their metal was placer-mines (where the mineral is found among the surface soil) on the unexplored headwaters of the vast system of waterways which originates in the Eastern foothills of the Ecuadorian and Peruvian Andes. As a matter of fact, for many years past expeditions have frequently started out for the Andes on the same quest from Buenos Aires and other centres in the belief that there exists somewhere a vast hoard of wealth.

This expedition of ours having become the talk of the town, and its fame having reached the ears of Ambusha as he lived on *giamanchi* in a dugout on the waterfront, he came to me with his proposition. He had lived in this condition since his arrival from some unknown part of the Amazon network where he had doubtless practiced

some of his arts all too successfully and had to decamp hurriedly in consequence.

Of the Trotsky rather than the Hindenburg type, he was a blue-eyed, sandy individual, big-boned, and of average height. His manner was oily. He stood with his hat in his hand, and his eyes, feet, and statements were shifty. He was obviously a liar, but appeared to be a muscular liar. His subsequent conversation showed him to be a devout student of anarchism, toxicology, and circumlocution, as well as of languages. He was of the type which prefers to see its enemies pass away quietly rather than to run the risk of shooting them. He was given to rhetorical outbursts, in common with his misguided kind, which invariably ended with the supposedly unanswerable question "What right have *you* to make laws to govern *me?*"

But as we have said, he was at any rate muscular. So when he presented himself to me with a suggestion that he would accompany the expedition as cook, that he didn't expect any return for his services except his keep, and that, if we found gold, we could give him what we liked for his trouble, it seemed to me to be a fair proposition, in view of his alleged skill with the paddle and the frying-pan. I engaged him on the spot, and moved him from his lair to the hotel. We kept him there for a fortnight, to his intense surprise and joy.

But in the meantime much had happened in Iquitos.

CHAPTER XII

TROPICAL POLITICS

A coveted post—The Foreign Legion—*La moda inglesa*—We make ready—A diary.

It cannot be more than about six hundred miles from Iquitos to Lima as the crow flies. But to reach one from the other, the stretch of country which lies between the two towns is not the route that would be followed by the ordinary sane individual, much less by a body of troops. It means crossing the Andes by practically untrodden paths, and penetrating a belt of country infested with savage tribes, unmapped, and across a large part of which the only method of transport is by dugouts. And so it came about that for all practical purposes, the authorities in Lima had no influence over events in Iquitos in those days. To send troops, for example, was more than a six months' task from the day when an envoy left Iquitos to the day when the troops arrived. The double journey which had to be undertaken was, of course, about nine thousand miles each way; down the Amazon to Pará; down the Atlantic coast of the South American Continent, round the Horn, and up the Pacific coast to Callao, the port of Lima. Cabling direct from Iquitos to anywhere was impossible, because there was no cable laid. The only chance an envoy would have of getting into touch with Lima quickly, was by communicating from Pará, on his arrival there, or possibly from Manaos via Pará, if the line between the two places happened to be in working order. Owing to the shifting of the river-bed, this was very seldom the case.

And so it happened that the Governorship of the province of Iquitos was not only a post of great personal responsibility, but also a very lucrative one. The Governor was in charge, not only of the collection of the export tax on rubber and the natural products of the country, but also of the heavy duty charged on the merchandise imported to pay for these products. The whole system of trading hinged on the principle of credit, known locally as the *aviador* system. Goods necessary for rubber-posts and for the equipping of expeditions were advanced by the merchants to all comers, to be paid for at some future date in rubber. Practically all business was done by bartering in this way, there being very few cash transactions and indeed very little cash to be had. Coin of all countries was taken at its face value, the £ sterling being the recognized standard. This necessitated the importation of vast quantities of merchandise suitable for the Indians, such as trade-guns, machetes, shirts and trousers of various colours and designs, canned goods, and a multitude of other things. The duties payable varied from day to day, and were charged at the highest rate possible, that is to say, at the highest rate which it was thought could be extorted from the individual merchant, the penalty of non-payment being an appropriation of the merchandise or the closing of the store, with a military guard.

In the absence of a civil police force, the town was under a kind of martial law controlled by the military, with the Governor at their head. Bribery and corruption were rife, and each successive Governor strove to make his fortune more quickly than his predecessors. Catch-as-catch-can was the order of the day. With the inexhaustible supply of rubber on the one hand, and the undying demand for it by the civilized world on the other, every ambitious free lance had his eye on the Governorship.

One day, shortly after a change of Governors had taken place, a boatload of some fifty ruffians recruited from the outlaws in the rubber-camps, headed by the Pretender for the coveted post came up-river and anchored below the town. During the mid-day *siesta,* they landed and proceeded to the barracks. Most of the garrison (of about an equal number) were asleep, or out in the streets chasing domestic hogs, which roamed at random throughout the town, and became such a nuisance that they were by a Governor's decree, liable to capture by anyone who would rid the streets of them. It was an easy matter, therefore, to take possession of the barracks, swear in the former Governor's guard, locate the Governor himself, chase him into the open street, and shoot him down as he ran. His successor, however, in his anxiety to make his fortune in record time, exceeded the speed limit. By informing the merchants that in all their recent importations they had paid duty to the wrong man, and requesting them to make a second payment, he alienated the sympathies of the community at one fell swoop. But, curiously enough, the money was paid owing to lack of organization on the part of the traders.

The success of the coup inspired yet another adventurer to try his hand at the same game. By a similar stroke he obtained possession of the reins of power, eliminating the Governor in the usual way. But when it came to the collecting of the duty for the third time on the same goods, he found that this was more than the trading community would stand.

It began to be whispered that it was time that something was done. The first thing was to find the man who would organize and lead the counter-attack. This was where Solomon Casas, Morrocan Jew and ex-British Army warrant officer, came to the fore. A prominent merchant himself, he was in addition a good soldier.

Under his command a "foreign legion" was formed, to protest, in the only way understood in Iquitos, against organized robbery on the part of self-constituted authorities. Those of the population who were not already in possession of firearms were equipped by Wesche and Co., the largest firm of merchants in the town, and a force of about one hundred men was fitted out. The foreign population consisted of a goodly number of Brazilians and Portugese, some fifteen or twenty Frenchmen, about twice as many Germans, about twenty-five Englishmen, thirteen Americans, and a sprinkling of the citizens of the neighbouring Republics. They were nearly all overseers of the rubber-camps, captains and engineers of the small privately owned steamers or members of the staffs of the business houses.

And so one day in broad daylight, the force, to which all our party (except Ambusha) belonged, formed up in front of Wesche's store, and marched down to the barracks. There was, of course, no resistence; a few minutes talk with the sentries convinced them that the wisest thing they could do was to disappear. The "Governor" was sent down-river in the first available boat. The "Foreign legion" took over control of the customs, etc., and sent word to the Government at Lima, that they were preserving order until such time as a properly constituted Federal authority should arrive.

And so everybody once more allowed their shirt-tails to hang loose over their breeches—pulled their socks up over the outside of their pant-legs, and returned to the normal days work of receiving canoe and raft-loads of rubber, distributing merchandise in exchange and taking their money from the rubber-collectors who spent a few days in the town before going back over perhaps a thousand or 1,500 miles of wild country which separated them from their stations. There was method in the

apparent madness of this style of dress, a fashion which had been introduced by myself a few weeks before, and which was universally adopted, being named by the natives *"La moda inglese."* Its advantages lay, as far as the socks were concerned, in the protection which it gave against the attacks of "jiggers" (creatures something like ticks, only more vicious, which lived in the grass and weeds of the streets), *nihuas* (an exceedingly small but potent insect, which makes its home under the toenails and there lays its eggs), *buscacojones* (a small ant which attacks the legs), *garapatas* (common ticks) and other local pests; and as to the method of wearing the shirt, this was conducive to coolness and freedom of movement.

Iquitos settled down, then, to its red pepper, rice, beans, bananas and *paichi;* these five staple articles of food, form the principal diet of all who live in that district, almost to the exclusion of anything else except imported luxuries such as canned goods; of the latter, there was in Iquitos as good a supply of the best quality goods from all quarters of the world as you could find in New York; a man with a taste for delicacies could enjoy himself. I have referred to red pepper as a staple article of food, which is no stretch of the imagination; every table had its dish of red peppers, which were consumed ravenously, although one would suffice to choke the average man, besides the ever-present *curi-uchu* sauce (in the *Inca* tongue "golden pepper") composed of equal parts of these peppers, onions and grease; this sauce was used to efface the flavour of every dish which was served up, all losing their individuality under the influence of this all-powerful weed which is cultivated everywhere in the Amazon basin.

One night, as we were sitting in the hotel discussing ways and means of getting up the Amazon towards our goal, in walked a tapir,—a reminder of the old Yasuní

days. This animal lived between the hotel and the restaurants across the way, begging for tid-bits from the guests at the tables. Among the other domestic pets of Iquitos, by the way, was an ant-eater, which was as tame as a lap-dog, but which confined itself to its natural diet of ants and was, by the same token, a welcome visitor wherever it went, except at my table where, for obvious reasons, it took the edge off Jack's and my appetite.

It may be mentioned at this point that our number was completed by two Peruvians, Philipe Iberico and Pedro Valcarcel; the former was a trader who was in Iquitos at the time by chance, and whose several years of acquaintance with Morse led to his offering to join our expedition; the latter was a carpenter who had come down from the interior attracted by the prospects of profitable business in this new and flourishing trading centre, where wages were at a high level.

As for the equipment of the expedition, we started off by buying stores of all kinds, but very soon discovered that it was unnecessary to involve ourselves in further expenditures, for many of the Commercial Houses were only too anxious to aid us in our venture in the hope of being favoured with our confidence and our business, should we meet with any notable success.

Some of our first stores purchased were "hardtack" and corned beef, which we found we could procure from the steward of a Liverpool boat which was anchored off-shore. There was a certain air of mystery about the transaction, for the completion of which we were told to put off at one o'clock in the morning in a dugout. We were to be met on the port-side by the steward with the barrels, ready slung over the side. Silence was, for obvious reasons, to play an important part in the operation, it being extremely desirable not to disturb either

the ship's officers, or the customs lookouts on shore. We were successful in one, but not in the other. On approaching the vessel in the swift current, we swung round, dropped a paddle in the canoe's bottom, and fetched up with a bang against the side of the steamer. Then, in lowering the first barrel into the canoe, those who handled the ropes let go too soon and besides creating considerable noise and confusion nearly sank our craft. While in the act of lowering the second barrel, the Captain walked out on the bridge in his pyjamas, and surveyed the scene.

To our astonishment, he never uttered a word. We completed the business in hand and pushed off for shore, making a successful landing below the town. The steward afterwards explained to us that the Captain had not interfered as, although he (the steward) might have been in a compromising position, he had on previous occasions observed other and greater irregularities in which the skipper himself might have been implicated.

Before all our purchases were completed, we realized that we would have a cargo of at least several tons. A canoe large enough to carry ourselves and such an outfit did not exist in the neighbourhoods of Iquitos; so Morse and Iberico started at once for the "up-river" country, in search of one. Not finding anything suitable, they heard of a giant cedar in the forests beyond Yurimaguas; located the tree and had the dugout canoe hewn expressly for the purpose. The was named the *Exploradora.*

This finding of a suitable canoe was the source of a most vexatious delay. Our purchases and outfit were complete and we were ready to make a start. Finally we received word from Morse to start "up-river" by the first steamer, and that he and Iberico would meet the

expedition at the mouth of the Huallaga, where they would await us with the big canoe; bringing along blow-gun poison and a few other articles not obtainable in Iquitos.

Nearly six months had gone by since the night when Jack and I sold out for cash. It was now the middle of June, 1899, and as far back as January I was expecting to be able to get away, as I know from letters written home at the time. I have one dated the 12th of January, which I wrote to my brother-in-law, M. C. Arnot, in which I expressed my disappointment at not getting off at the time I anticipated, and "expected to leave the *day-after-tomorrow.*"

We had our arms and amunition, shovels, picks, and gold-pans, one bivouac tent, cooking utensils, medical kit, a complete set of tools for effecting repairs, spare clothes sealed in rubber bags, a banjo, Brazilian tobacco in long bars, half a dozen kegs of rum, four dogs, (one city-bred animal—poor little beast) and concentrated canned foods which were chosen for their compactness, including a vast quantity of supplies and trinkets to trade with the savages.

Here I must not fail to mention a decision which I took just before we started, for it had a most important influence on this record of my travels. I resolved to keep a diary, or at least some form of journal, to record my impressions of the Inca Gold Expedition. Perhaps I felt a little regretful of having no record of the past two years, or perhaps it was merely a passing whim, the result of discovering some old memorandum-book amongst my kit. I have forgotten of what the idea was born, but the travel-worn document itself I retain to this day. The last thing I did before leaving, was to write and tell my family to send some letters to the American Minister

at Lima. I did not know which I should see first, the Pacific or the Atlantic.

The first, somewhat laconic, entry in my journal records our departure under the date of Friday, June 13th, 1899 . . . "Finally left Iquitos to-day after nearly two months of *'manaña.'* "

And so we could say "good-bye" at last:

"Chug puncha cama, Iquitos!"

CHAPTER XIII

Barranca

"The land of butterflies"—The Cocamas—The last outpost—The hardwoods of the Amazon—A false alarm—A local Rockefeller.

Don Juan Ramirez was a wealthy dealer in rubber and slaves, so wealthy as to be almost a millionaire. Starting like any other *cauchero,* he had organized his business until it grew to enormous dimensions. By the time we made his acquaintance he had three hundred Indians working rubber for him in half-a-dozen rivers, stations all over the head waters of the Amazon network, and a steamer for carrying supplies to his different camps, and bringing back the stores of rubber which had been collected. He was a Peruvian with Spanish ancestry, a big, jolly man, accustomed to giving orders and seeing them carried out.

The owners of private steamboats on the Upper Amazon were in the habit of taking passengers for a more or less nominal sum, owing to the absence of anything in the shape of a regular line of boats. And so it came about that we heard of this gentleman, and applied to him for a passage to Barranca, the farthest west which steamers ever went, and his own home plantation. In fact, Barranca was the last outpost of civilization on the Marañon (the name for the upper reach of the main Amazon stream). Of our progress up-stream I will quote from my journal.

"As we steam towards our destination, we pass many pretty little Cocama settlements, whose small clearings and thatched roofs break the monotony of the never-end-

ing dense forests which line either bank. Every now and then, a canoe darts out from one or other of these hamlets; the Captain slows down; they paddle alongside, and the *Onza* has one more lot of passengers to carry, one more canoe to haul. These newcomers are frequently women, olive-skinned, black-eyed, with long black hair, barefoot and bare-headed, clad in the skirt and blouse with which civilization has decked them out. They are heavily decorated with necklaces of monkeys' teeth, trade-beads, and a few feather ornaments. They sit cross-legged on the deck, nursing the babies which they brought tied on their backs, chat in the Cocama tongue, which differs markedly from the Inca of the Napo, and drink the *masata* (the *giamanchi* of the Jívaros) which invariably forms the chief item of their kit."

The moral effect of these clearings which break up the most monotonous landscape in the world, has to be experienced to be understood. In the whole of the Amazon system, where there are some fifty thousand miles of water navigable by river-steamers, there is absolutely no relief from the dense walls of forest which stretch interminably, except the infinitesimal spots where man has left his work in the shape of a town, a clearing, or a hut. One lives eternally between two green masses. No hill rises in the distance, no rock hampers the myriad trees, no barren spot is there to break the endless chain of tropical verdure which entwines itself round the very soul of poor helpless man, and holds him a prey to an overpowering weariness. This has been called "the land of butterflies and humming birds"; rather is it a quasi-mesozoic swamp teeming with animal and vegetable life closely akin to their primeval ancestors, where all the noxious insects of the earth appear to thrive more lustily than in any other region; the rubber hunter's life is a torment which can be stood for but five months

in the year, and only then under the incentive of the enormous gain derived from this industry and the prospect of turning the profits into the earthly pleasures offered by Manaos and other Amazon towns.

Thus we continued up-stream for ten days. Daily we stopped to hunt the night's dinner, and to chop fuel; on these occasions, a party of *mitayeros* was sent off into the woods, the principal quarry being monkeys; these animals formed the *chef-d'oeuvre* at every meal, served up in the form of soup, stew, roast—in fact in almost as many ways as the meats of the civilized dinner table. Their meat is clean, red and firm, with a flavour as much like beef as anything else; in common with the latter, it is the only meat of the forests which can be eaten every day of the year. This is an astounding fact when one considers that a man can become nauseated by being forced to live on deer or wild turkeys, or any other game of the forests, so that in the end he could die of starvation surrounded by meat. These remarks, of course, do not apply to every variety of monkey on the Amazon, but rather to the largest species—the *maquisepa* and the *choro;* all the monkeys are edible but their meat is not as attractive as that of their greater brothers which we have named.

On the tenth day we arrived within a few hours sailing of Barranca. As we turned a bend in the river, we came upon the last Cocama settlement on the Marañon. Here the country is flooded annually, making it necessary to build the huts on heavy piles perched a few feet above the surface of the floods on the left bank, it harbored some ten or twelve families, which lived by fishing and hunting. They supplied the surrounding rubber-posts with *paichi* and *vaca-marina* (a manatee which grows to about seven feet, and whose meat is cured in the same way as the *paichi,* that is to say, split and sun-dried).

Paichi is to the Amazon what *bacalao* (salt cod) is to Spain, though a greatly superior product. Wild hogs and monkeys, turkeys and *paujil* fell to their trade guns, and were sold with the fish. In return they received powder and shot, Singer sewing-machines, machetes and axes, fish-lines and hooks, clothing and sham jewelry.

Here we were also joined by Morse, Iberico, and most important of all, the *Exploradora,* the big canoe. They also brought an Indian boy along named Juan, to do chores about camp.

We anchored off the village and bartered our trade goods for food. The little children came running out of the thatched huts, seized their canoes, and paddled out to meet us. The Cocamas are the most expert on the water of all the Amazon Indians. They have a clever way of handling their canoes when out spearing river-seals. When the animal has been killed, since it is impossible to lift it over the side of so frail a craft, the occupants (generally a man and a woman) slip over the side and flood the canoe until they can float the river-seal in. Then, with a combined effort, the man holding the seal's nose and the bow of the canoe together, the craft is suddenly forced ahead, and the rapidity of the movement causes the water which a moment ago it contained to flow out across the specially constructed poop and allow the canoe to float once more, this time with the seal inside. They then climb back to their places from opposite sides and paddle ashore.

For months at a time, these people are stranded without a foot of dry land nearer than Barranca. They are, literally, an amphibious people.

Pushing off after re-victualling our larder, we made Barranca that same night. Here, as we have said, is the last post of civilization. A creation of Don Juan Ramirez it boasted a general store above which Ramírez and his

family lived, a sugar-cane mill, a rum distillery, and a number of thatched houses set in an irregular fashion around a clearing on the river-front which almost amounted to a plaza. The whole village stood on a bank (*puca urcu,* as the Jívaros say, meaning a red bank) from which on a clear day the Andes, one hundred miles away, could be seen. Ramírez had had his store and house built on the centre of this clearing, standing between the village and the river, to protect himself from surprise attacks from the savage tribes above the Pongo Mensericheé. In spite of the precautions which he took—the balcony running round the second story, which gave a commanding view of the surroundings, the heavy hard-wood doors, the armament of palm-wood placed around the balcony, affording an effective protection against spear-thrusts—about ten months previous to our arrival, Barranca had been successfully raided by the Huambizas, who had carried off some of the white women, and looted and burned most of the Haciendas. The attack was a typical example of Indian treachery. A party arrived from up-river professing friendship and a desire to trade. They insinuated themselves into the village, in the absence of Ramírez himself, and at a given signal attacked, aided by their comrades whom they had left, fully armed and ready to spring, in the forest nearby. The owner's brother put an end to a number of the raiders, but he received no assistance from the head storekeeper-secretary-assistant, who made a dash for cover at the first alarm, and, with a Winchester rifle in his hands, turned about at the edge of the clearing and stood petrified while his wife was carried off crying for help.

This gallant gentlemen's affection for a large assortment of patent medicines was commonly supposed to account for the sodden state of his mind and his peculiar conception of a man's duty. These medicines, by the way,

were put up in small bottles, and each bottle bore a number; a pamphlet which formed part of the outfit gave instructions for their use:—"For a cold in the head, two pills from bottle No. 3, four times a day." Or again—"For intermittent attacks of shivering and perspiration, one tablet from bottle No. 6 every two hours." The young man in question resorted to his medicine chest with such frequency that he ran out of certain numbers long before the rest, but such was his faith in their healing qualities that if he required two of No. 8 and hadn't any, he would take four of No. 4 in their place.

Here, then, Ramírez had his headquarters. Many of his *caucheros* with their families made this their permanent home—Barranca itself, and the numerous small clearings in the forest near-by—to which they would be brought back for a period of rest after a season or two of work in the farthest rivers in which their lord and master was working rubber. Again there were the permanent inhabitants who worked the sugar-cane mill, operated the distillery, tended the plantations where the cane and the *yuca* were grown, made dugouts, built new houses, looked after the aqueduct which brought the water to the wheel which gave the power to the mill, and in fact did the hundred and one jobs in connection with the running of a settlement. Here also were native carpenters, who cut from the great variety of hard-wood trees which the forest contained, every kind of household article and portions of houses, and even such things as main shafts, pulleys, bearings, and other machinery parts which would be constructed from metal in the civilized world.

There is a great future for the Amazon forests, with their inexhaustible supplies of numerous grades of the most enduring and the finest hard-woods which the world produces. Some day perhaps there will be shipped from

this region to civilization undreamed-of stores of material. The practical difficulties in the way of such an enterprise are enormously heightened by the fact that these woods will not float, either green or seasoned, and by the impossibility of building roads except at tremendous cost. At any rate, a floating sawmill could work the timber growing along the banks. But let it not be thought that the ordinary wood-cutting tools can be used for working this class of lumber. A circular saw revolving at the usual speed would lose its teeth in a few hours; a chisel if driven too firmly in will frequently leave its edge in the wood on being withdrawn; it is impossible to drive a nail into the wood at all; a plane cannot be used on it; it must be drilled as carefully as steel.

The fallen trunks we came across from time to time, all covered with leaf-mould, moss, and vegetation, were found to be as sound as on the day when they fell. Many a time, when working up small streams in canoes we had to stop in the face of a trunk which, fallen across from bank to bank, formed a natural barrier, as solid an obstacle as a boom stretched across the mouth of a harbor. Unless the water had fallen and left the trunk stretched high above its surface, such a tree would be impassable; on testing these trunks with an axe, the flying chips would sink like stones. In Barranca we saw eight logs, some twenty feet in length, which had been in use as piles for over forty years; I tested with the machete both the part which had been under ground and that above ground. Each was in a perfect state of preservation. Here surely is the solution to the problem of the rapidly diminishing supplies of material for railroad sleepers.

Life in Barranca was not without its thrills. We had not landed more than a few hours before the alarm was given. A *mitayero* returning from the chase an-

nounced a large party of Jívaros in war-canoes coming down-stream. Rifles were seized and stations manned. We were determined that there should be no repetition of the raid which was still fresh in the memories of the survivors. After waiting two hours or so without result, I put off in a canoe with some thirty Indians and half-breeds armed with Winchesters to reconnoiter. We found nothing. Returning to Barranca, we waited to see what the next day would bring forth. It brought the Jívaros, but they came in peace. This party of Aguarunas was bent on a friendly trading mission. They assured us that we had passed within a stone's throw of them the day before. Their super-human skill at concealing themselves and their canoes was again demonstrated.

With the aid of liberal draughts of fire-water, Ramirez persuaded the new arrivals to treat us to a display of war-dancing and Indian methods of attack. He was a good host and a good friend, that illiterate millionaire. I say millionaire, but it must not be supposed that he had large quantities of cash at his disposal. The lord of Barranca kept his wealth in the shape of merchandise, rubber, buildings, canoes, a steamboat, slaves, and all the vast paraphernalia necessary for the working of his net-work of sub-stations; last, but not least, in the good-will and confidence of the Indians under his command and the merchants of Iquitos. He enjoyed unlimited credit and was by the same token a man of unlimited means. He was, on the Upper Amazon, much as are J. P. Morgan & Co. in New York, or the Credit Lyonnais in Paris. His was the life of a man untrammeled by the moral code of civilization, if you like; but this much may be said of him—and it cannot be said of many men—that he lived (and for all I know, still lives) in a world which trusted and looked up to him.

CHAPTER XIV

BORJA

"War-bags"—Ambusha shows the way—A double celebration—The white alligator—Mitaya Isla—Turtles—We face the Pongo Menseriche—A tragic site.

Our host's hospitality did not end at Barranca. He insisted on our making use of the *Onza* for a further distance up-stream, in fact as far as the steamer could go. The canoes for our expedition, one of which had been towed up from Iquitos, were increased in number by another bought in Barranca—three in all.

And so we made our final start. At dawn on the eleventh day of our stop at Barranca, the *Onza* pointed her nose up-stream, the first steamboat ever to navigate the waters of the Marañon above that station since the fall of Borja. The days of strenuous preparation were over, days of struggling with ammunition cases, boxes of trade-goods, and "war-bags." The latter is the name given in the Western States to a prospector's kit-bag; ours were specially prepared to meet the local conditions, as is done all over the Amazon; indeed, any camping party that had to face the possibility of floods, heavy rain, or overturning in river or lake, would find this particular style of package invaluable. These bags are made by stretching linen over a flour barrel, or any similar object, sewing it up, and coating it with rubber-milk drawn fresh from the tree; several coats are put on, each in its turn being allowed to dry. The barrel is withdrawn, and a perfectly water-tight, cylindrical bag is the result. After stowing all the stores of a delicate

nature which damp would harm, the neck of the bag is drawn together with a cord so tightly that no water could possibly enter. These bags, being flexible, vary from day to day in size, according to the amount of kit they contain, and are thereby the more handy, as they never occupy more space than necessary, unlike a case or trunk. They can be thrown overboard when going down-stream and towed. They can be left outside the tent all night in the rain to make room for beds. When "packing" is necessary, they fit the back and shoulders and thus ease the burden. In short, they are the most versatile form of luggage yet invented.

Two days of capibarra hunting, lounging on the deck, impromptu concerts for the benefit of Don Juan José, and fuel chopping, brought us to the highest point which the *Onza* could make.

It was during a halt for cutting fuel that we had our first disillusionment as to the prowess of the cook of the expedition, Ambusha. I took him off into the dense woods to have a look for game, and see what we could find. His assurances as to his knowledge of wood-craft had made a deep impression on the party. It remained only to see him in action.

Well, he set off as hard as he could go, plunging into the thickets, and apparently disdaining to mark his trail, forging ahead so fast, indeed, that it was all I could do to keep up with him. I began to wonder whether he realized that it was roughly a thousand miles, in the direction in which we were making, before we should be clear of these woods, a like distance to the North before striking the Caribbean Sea, that the Andes lay to the West between us and the Pacific Ocean, and that some three thousand miles of virgin forests, rivers, and swamps awaited us to the East before we could gaze on the Atlantic. To lose oneself in this, Nature's

greatest labyrinth on earth, was not a prospect that appealed to me. My experiences on the Upper Yasuní had been enough to leave a vivid impression of the folly of placing too much confidence in a newcomer.

On reaching a well-marked tapir trail, my suspicions were confirmed, dramatically enough. Ambusha fell on his knees, examined the tracks with an expert eye, smelled them, licked his finger and felt them (this last was one too many for me!) and announced solemnly that "a war-party of Indians with women (probably captives) had made along that way, going west, passing above the Pongo, within the last month." The shock was certainly great, but not too great to prevent me from asking him whether he could tell me anything about their religion or morals.

After this I cut my own trail. This precaution saved us both from the destruction to which Ambusha would have led me. He attempted to dispute the way back, but I noticed that he took care to trail me within sight and hearing, while I made my own way to the boat.

As I say, at the end of the second day we had made the highest point to which the *Onza* could go. The current had become so swift that no further progress was possible. The steamer was labouring hard and making practically no headway. So we drew in to a sand-bar on the left bank of the river, and dropped anchor. We cleared out, bag and baggage, untied the canoes and beached them, and, after giving our host a send-off with cheers and rifle-shots, we set to work to build a temporary baggage-shelter.

Two men working for an hour can make a first-class waterproof thatched hut, fifteen by twenty, with the aid of the enormous palm-leaves of endless varieties which are to be found everywhere. A slanting roof, made of many thicknesses of palm is supported by bamboo poles driven

into the ground. But elsewhere I shall go into further detail as to the building of these houses.

Our first evening was passed in contentment and rest. My journal describes the scene:

"June 29th, 1899. We have decided not to do guard-duty until we reach the Pongo, as the savages are rarely seen below that point. Everyone is smoking and Ed. is playing his banjo. All well, and in the best of spirits."

Here we passed five days, hunting to keep the larder full, and waiting for the water to fall, so that we could make the passage of the Pongo. On the 30th the river was still rising and we had to withdraw to the main bank, some four feet higher than the sand-bar. We made false bottoms for our canoes to keep the cargo out of the bilge-water, and palm-leaf covers (*armariaris*) to protect it from sun and rain. I shot a big parrot, the first meat captured on the expedition." This was a macaw, or as the Indians say, *huacamayo,* as large as a chicken, and the possessor of beautiful plumage of blue, red, and yellow. The ants were beginning to harry us, and we had a shower or two to damp the enthusiasm of the "tenderfoot" members of the party. Hunting was good, monkeys, turkeys, and *paujiles* falling to our guns. One night I brought in four monkeys, which we roasted for supper. With their brains we made a paste which, together with "hardtack," resulted in a delicious sandwich, resembling *pâté de foie gras.*

On July 2nd (a Monday) the river fell two yards and we reckoned that a start would be possible on the 4th, which indeed we made. Thus by a curious coincidence our final start for the Pongo and the unknown country beyond fell on Independence Day. We opened a demijohn of rum to celebrate the double event and were "Off in high spirits at 10 a.m."

Sleeping on a sand-bar in the open that night, with the

sole protection of mosquito-bars suspended from the canoe poles stuck in the sand, we had the luck to strike a fine night. Here we started to go on guard-duty, Ed. and I taking the first watch, it being commonly agreed that all would sleep more soundly if this precaution were taken.

One of the most remarkable kills which we made during the whole expedition was made there. A snow-white alligator, measuring about five feet in length, was shot by Jack, and prepared for supper.

"Some were a bit shy about trying it at first, but all voted it the best meat on the trip to date. The meat was perfectly white, and tasted very much like chicken. The skin was left to the kites and buzzards on the sand." (It was impossible at this stage, the first of a two year trip, to start preserving skins and packing them round with us.)

Whether this was some freak of nature (an albino, perhaps!), I do not know, but certain it is that I have never come across a similar reptile in any other place, nor heard of one. It was not an iguana, which is so different in appearance as to make it impossible to confuse the two. The formation of the jaws and teeth left no doubt as to its being an alligator. Of our progress from this point to within sight of Borja and the Pongo Menseriche, I cannot do better than quote from the notes I made at the time.

"Starting at sunrise, we paddled and poled till noon, when we rested and ate "hardtack," roast alligator (the remains of the white one), *farinha* (a kind of tapioca made from arrowroot, and one of the staple foods of Brazil), and molasses. We lost two dogs, which jumped overboard and disappeared into the forest, and were probably killed by *tigres*. The river is becoming narrow, and mud-bars and banks are giving place to sand and

gravel; the water is becoming much clearer and colder. The foothills of the Andes are continuously in sight, and appear to be only ten or fifteen miles away. (The actual distance must have been about fifty.) The "green-hands" are becoming more skillful with pole and paddle."

Of the art of manipulating a canoe in swift water, I speak elsewhere; a moment's reflection will enable the reader to understand how it came about that we had to leave a portion of the cargo of the *Exploradora* (the big dugout), "caching" it on Mitaya Isla. (This island was named thus on account of the abundance of game.) The swiftness of the current, and the presence of old trees whose roots had caught in the bed of the stream, made the steering of a fully-laden craft, with a freeboard of only three or four inches, a risky game. One day we shot a *lumbigui* (toucan). In accordance with the indian custom, we looked for the worm in its eye, and, what is more interesting, immediately found it. All our efforts to persuade Jack to put it in his own, so that he would have better luck on his next *mitayo* hunt, failed; indeed there was no candidate for the privilege. So we finally put it in one of the dogs' eyes, in the hope that he would keep watch a little better. Greatly to our disappointment he barked at everything from ants to moonshine, and the next day he too was carried off by a *tigre* within a hundred yards of camp.

Not a day passed without its own tragedy or comedy, or both. Mitaya Isla, where we were now encamped, was, as I have said, teeming with game. We had arrived on July 8th, and the rising of the water once more delayed our progress. Moreover, one or two of the party were feeling the strain of the hard poling and paddling of the last few days.

The island must have been connected with the mainland at low water. It was about three miles long by

half a mile broad. No palms grew on it, the only vegetation from which we could make shelters being the wild cane (like sugar-cane in appearance, growing to a height of twenty feet). This afforded poor shelter from the rain, though it cast a good enough shadow. Often, as a consequence, we had recourse to the canoes; wrapping ourselves in our blankets, we would creep under the shelter of the palm leaf covers we had made some days before, for it rained as often as not.

Mosquitoes were more plentiful than game. These were, broadly speaking, two varieties; the day-shift and the night-shift. For those on guard at night they "made life unbearable." Smoke was useless as a protection against them. When it rained, we stripped to keep our clothes dry; what with the cold water (the proximity of the snow-capped Andes kept the rain at an unpleasantly low temperature), the choking smoke (we had to sit near the fire for warmth), and the attentions of the *zancudos* (the long-shanked ones—*Spanish*), the nights passed slowly, sent on their way to the accompaniment of some frank remarks on life in general, and the Amazon in particular.

I see on reference to my Journal that "Ambusha remains always near camp, and never misses a chance of a drink of rum, and is always punctual at meal-times. When he is not occupied with cleaning his rifle, he is busy reading up anarchism." By this time we had come to a unanimous decision to relieve Ambusha of his culinary duties; he might have been more proficient in the mixing of poisons, in which he claimed to be an expert. From this time forward, therefore, the cooking was done by watches.

The eleventh of July was a red letter day. On that date Morse discovered some turtles' eggs, and brought nearly two hundred back to camp. On the expedition

he proved to be the expert at this important branch of foraging for the larder. We named him the "Turtle-hound," and he was proud of the title. I will take this opportunity of saying something about these reptiles, which constitute the most sought-after, and at the same time the most abundant food of the inhabitants of the Amazon waterways, both white and red.

There are four varieties. The *charapa* (*cocama*), the largest, weighs on an average seventy-five pounds and deposits from fifty to a hundred and fifty eggs, slightly smaller than a hen's, in a single night; the Jívaros call these eggs *chájap*. Needless to say, if an attempt were made to put so many eggs back into the shell of the reptile which laid them, it would be necessary to cut the whole of the flesh away in order to make room for them. This is a miracle of production which, I think, is not surpassed in the animal world, except by certain insects. The second in size is known as the *taricaya,* in the Inca language; it weighs about twenty pounds and deposits some twenty or thirty eggs, half the size of a hen's and oval in shape, in one night. The *yambu* (*Inca*), is smaller still; it weighs eight to ten pounds, and lays about ten eggs at a time, of the same shape as those of the *taricaya,* but smaller. The last of the edible turtles is the land tortoise. I have found these of all sizes from six inches to eighteen inches in length.

The meat, and the soup which is made from it seems to be as good as any in the world, all four varieties being equally appetizing. The eggs are odourless and similar to a fresh hen's egg, with the exception that the white is not quite so albuminous; they are very nutritious, can be prepared in any way in which the latter can and, as I know from experience on the Amazon, when there is no other food to be found, they keep a man healthy and strong for weeks at a time. The shell is brittle during

the first twenty-four hours of incubation, but not afterwards. The most appetizing form in which they can be cooked is the sweet omelette. Broken raw, and beaten up with rum and sugar, they make a very fine "egg-nog." (I held the record with forty taken at one sitting in this form.) Finally, they can be eaten at any stage of incubation, and are just as good on the day before the young breaks the shell as on the day when they are laid.

The turtles come ashore at night, looking about them with the greatest care; their senses must be very keen and they are shy to a degree. The slightest noise or movement drives them back into the water where they are more at home than on dry land. They are indeed seldom out of the water except on the several nights in the year when they emerge to seek a location and deposit their eggs in the sand. They waddle up the sand-bars, leaving a double track made by the feet on either side of the shell. The result is a miniature wagon trail, which clearly indicates the size of the turtle, and consequently the number of eggs that may be expected. Following their trail until one comes to a point where it is broken and indistinct, the sand is tested with the heel or a pointed stick for a soft spot when the nests are easily located. The turtles take great care to bury their eggs so as to leave little trace of their presence. If rain has fallen two or three times since the tracks were made, it is very difficult to find them at all. Man is not the only animal which hunts for these delicacies; the jaguars are very fond of them, and the results of their feasts are often found in the shape of eggshells lying about in the midst of the unmistakable foot-prints of these beasts. When hungry, they even attack the turtles themselves, and scoop the meat out of the shells.

A curious fact about these reptiles is that the young, from the very moment when they break the shell, are

endowed with an unerring instinct which leads them, always under cover of darkness, straight to the river, even though there may be a rise or ridge in the beach which prevents them seeing or hearing it. They may be a quarter of a mile away when they emerge from the sand where they were hatched, but they never hesitate. Furthermore, they never break through the cover in which they were deposited by their mother except at night. It would be death for them to come out of it by day: if not from birds of prey, then from the sand, which would scorch their limbs before they could reach the water. I once saw a practical demonstration of the fate which would overcome them if they came out by day, having disturbed, during an egg-hunt, a nestful which had been hatched out, and which would shortly have broken cover. The yolk of the egg, which remains attached to the underside of the young reptiles' shells, and from which they derive their nourishment, while gathering strength to break and run for the river, was in this case practically consumed, so that the turtles had enough strength to reach the river, had it not been that they were unearthed by me in the daytime. Once discovered, there was nothing for it but to attempt to get to the water, which they started to do, streaming off more like a stampede of gigantic bed-bugs than anything else. Before covering ten yards, their legs shrivelled up, turned red as if cooked on the fire, and they immediately died.

We found sand-bars two or three miles in length, and hundreds of yards broad, in which the eggs were so thickly strewn that it was practically impossible to dig without finding them. Considering that the rivers in that country are lined with a succession of these sand-bars at low water, it was a source of constant wonder to us that with such teeming millions of eggs, so few

turtles (comparatively speaking) were to be seen. If only half the young reached the water, there would be no room for them. And yet, such is the perfection of this natural system of incubation, we never found a single bad egg in any nest. The *tigres* cannot possibly account for more than a minute proportion of the total number of young, indeed, the cause of their destruction must lie in the water, for that the vast majority reach it, is certain. It would seem improbable that the old turtles themselves eat the young, for in all those that we cut open we never found traces of anything but vegetable matter.

Life is exceedingly persistent in these reptiles. The head, after being separated from the body for hours, will bite as when alive, and the legs, if touched after being removed from the body for a similar length of time, will move vigourously. I have even cut a turtle's heart into twelve strips, and watched each continuing to beat for some minutes (in fact until the sun dried them up when we exposed them) with the regularity of the whole organ during life. A pot-full of pieces of turtle put on to cook in cold water will force themselves out by the post-mortem muscular activity, which refuses to cease until the water reaches a temperature sufficient to mortify them.

"July 12th, Game, who has been ailing for the past few days, has broken out all over his body with measles or smallpox, we don't know which. He travels in the bow of the *Exploradora,* covered by the palm-leaf canoe tops, which shield him from the burning sun and frequent showers. He is delirious most of the time."

This was our first experience of sickness. Fortunately he recovered within ten days, and no one else was infected. It turned out not to be smallpox. My Journal records an amusing and instructive incident under the same date:

"Jack and Ed. went out last night to watch for turtles. They fell asleep and while they dreamed, the turtles deposited their eggs all about them, within a few feet, one having actually crawled over Jack's legs, which was proved by the tracks next morning. They brought back several hundred eggs, but no turtles." It was a remarkable thing that they should have ventured so near to the men. The turtle is one of the most cunning and sly creatures, possessed of a very sharp pair of eyes, and apparently a sense of hearing second to none. I say apparently, for it has been demonstrated by Darwin that the tortoises of the Galapagos Islands off the coast of Ecuador are stone-deaf.

On the morning of July 16th, we had broken camp at dawn, stowed our kit in the canoes, and were sitting round the fire sipping our coffee, munching hardtack and turtles' eggs (our regulation breakfast), and fighting off sand-flies. Suddenly, just as we were about to embark, Ed. caught sight of a huge *sacha-huagra* (the Inca name, meaning "a large beast of the forest" for the tapir, or *danta,* as the Peruvians say, the largest pachyderm of the Amazon woods) swimming the river some five hundred yards above where we were, and making for our island. Jack was the only man who had his gun ready, which was fortunate for us, for he was the big game hunter of the party, and a crack shot. He raced off to get a shot at the animal, and shortly afterwards we heard him fire once. On his return, we greeted him with: "So he got away from you, did he?" "Yes, for about fifty yards," came the answer. Jack was a man of few words, but they were generally to the point.

So we all went off, eight of us, with tackle to drag the beast to the water. It must have weighed six hundred pounds, for it was all we could do to drag it a hundred yards. Once in the water, I got astride it with

a paddle, and floated it down to camp. We set to work to cut it up, and for many days it provided excellent meat, very similar to beef in appearance and taste. We cured it, of course, in the smoke of our fire. The feet and the snout were the great delicacies. These beasts are three-toed on the forefeet, and four-toed on the hind-feet, like the rhinoceros, and the general formation of the head is similar to that of the latter, but for the absence of horns on the long snout.

For the whole of that 16th of July we were busy dealing with the tapir, finishing up at night with a first-rate feast off the meat. We built a specially large fire (there was no trouble on that island in finding driftwood for fuel) and roasted the ribs, standing them up before the fire, and sheltering ourselves from the heat behind them. They formed a wall some two feet six inches high. The animal was in fine condition and that supper stands out in my memory as one of the best we ever had.

For the next three days we struggled on up-stream, fighting against ever-increasingly hard conditions. The channel was becoming narrower, and the current consequently swifter. Often we pulled ourselves along with the help of overhanging branches, sometimes we poled, at other times we had a hard stretch of paddling to cross from one bank to the other, a distance of some three or four hundred yards at this point; and yet again we would be obliged to abandon all forms of propulsion, and drag the canoes with ropes made of the tapir's skin. One day we were in the water all day long.

Meanwhile, Ed., Pedro, and the boy had been left behind on Mitaya Isla with some of the stores. Ed. was suffering from a strained back, Pedro had had a foot crushed by the big canoe, and the boy was left to do the chores for them. As for the rest of us, we were beginning to feel the effect of "being in the water all day,

irregular diet, and the abrupt changes from sun to cold rain." However, the thought of the proximity of our goal urged us to constant effort, and on the 18th we arrived within sight of that superb outlet for the full waters of the Marañon and Santiago and a hundred tributary streams, named by the Incas the Pongo Menseriche.

"We have just made camp on the point of an island, exactly facing the Pongo, into which the sun is setting at this moment; the *playa* (foreshore) is littered with our wet clothing and beds; the fire is burning, and the pot is on; Ambusha is grinding coffee; Jack is fondling his gold-pan, and Game is squatting by the edge of the water sharpening his machete. The scene here is magnificent. Behind us is a dense bamboo thicket, impenetrable by man or beast, and on either side of the point on which we have pitched camp, there are three hundred yards of swift water, which gives us a feeling of perfect security against surprise. Just in front of us are the foot-hills of the Andes, the nearest, through which the Pongo is cut, being less than a mile distant. Above and beyond stretch the heights, until in the distance may be descried the peaks of the farthest range in view, whose faint blue melts into the sky."

There on those very heights once stood the monumental cities of the Inca civilization, which towered supreme above the savage races of the South American continent.

You can picture the scene: Ambusha on his knees in the bottom of a canoe "grinding" the coffee for the evening meal on its flat poop with a heavy stone; Jack growling about that last monkey-gut that I had prepared for the G string of his banjo, and humming to himself intermittently the air of the ditty to which he was to treat us that evening—some new invention of his fertile brain. Game hoping to cut his way into that bamboo

thicket and stop the infernal screeching of the macaws, Iberico working on a new shirt (he was a great tailor, and had brought with him a roll of cloth); and I myself squatting by the fire, comforted by the sizzling of the pots and the last rays of the sun, scrawling the lines I quote above. Contentment possessed our souls. We were resting on our laurels after a hard struggle, and there lay the Pongo just ahead, with its secrets to be probed. And the *zancudos!* Gone—gone for ever until the day when we should be returning to civilization laden with our spoils; for all stagnant water had been left behind in the flat country, and with it the greatest pest of the Amazon, the ever-hungry mosquito. All around us was a scene of great beauty; behind us the forest stretching away interminably, and ahead, due West, the Pongo. I will resort once more to my Journal for a note as to how it appeared to us from the camp.

"Looking at it as we do from the side, it more resembles a water-gap than a canon; at least, the shoulder of the nearest ridge appears to slope away at about 45°." The reason for this misconception of the formation of the cañon (it really is a cañon), lay in the fact that the view was not directly into its mouth, but about at right angles to it. Thus we were merely looking across the top of one of the jaws. Incidentally, the spurs which form the northern and southern jaws, so to speak, would not form a continuous ridge if the mouth were filled in, but would overlap (or to use a military term which expresses the idea concisely, they are "in échelon"), the one which comes from the north being some thirty yards east of the one which comes from the south. This same formation continues as one pushes further on through the canon toward the west, the result being that the latter is a gigantic serpent with many twists and turns."

Next day, July 19th, we broke camp at dawn, eager to forge ahead. We pushed off from what proved to be the last *playa* before arriving on the site of Borja. It is perhaps worth mentioning that camping on the sand-bars is infinitely preferable to penetrating into the woods; in the latter case, a small clearing must be cut, the ground scraped clear of the old leaf-mould, which teems with insect life, and a strong roof built to protect the occupants of the shelter from being hurt by falling dead wood, cast down by the troops of night-monkeys (*tuta-cuchillo,* which in *Inca* means "a rambler by night") in their passage through the trees, or by one of the wind-storms which arise, particularly in the dry season, with startling rapidity. Lastly—and perhaps this is the most important consideration in country such as that we had now reached —there is the constant fear of night attack by savages, whose presence no white man can be confident of discovering until they are within a few feet of the camp.

Winding up-stream the whole of that memorable day, we had arrived at Borja—or rather what used to be Borja—in the early afternoon. To all except an experienced eye, the immense clearing where the town had stood differed in no respect from the primeval forest surrounding it. Indeed the jungle was so thick that we abandoned our first idea of pitching camp on this site, and crossed to the south bank where we finally settled. Clearing a small space on the bank itself (there was no playa, unfortunately) we put up a thatched roof as usual, and stowed our kit. Crossing again to the opposite bank that same evening in our anxiety to see what traces still existed of the town of Borja, we landed among the gigantic lime-stone boulders, at a distance of not more than two hundred yards from the very mouth of the Pongo, now revealed in its true form.

The site of Borja had been chosen in about the year

1865 by the Peruvian Government as a suitable spot for the building of what was meant to be the home of an agricultural colony, and a place from which the Peruvian flag could be flown. Thus the Peruvian title to the naturally rich but unmapped country between that point and Barranca would be undisputed, the same spot having been occupied, according to Condamine, by Ecuadorian missionaries. It should be understood—a fact that a native of a wholly-civilized country will find it hard to realize —that the frontiers of Brazil, Ecuador, Peru, Bolivia and Colombia, adjacent to and in the Amazon district, many thousands of miles in length, are purely imaginary. On the best modern atlases you will find, as often as not, that great tracts of this region are marked "Unexplored." The boundaries of the countries mentioned vary in accordance with the origin of the map; a Brazilian map will show Brazil to embrace immense territories which, on a Peruvian map, belong to Peru, and so on *ad infinitum*. A German by the name of Wolf once prepared a map for the Ecuadorian government, and drew his pencil round a large tract of country east of the Andes which was claimed by several other States, painting it green (the usual colour of Ecuador). He met with a great reception at the hands of the Cortes. This was the map a copy of which was presented to me by the President of Ecuador in person, Señor Eloi Alfaro, when I originally set out from Quito.

The only real decision that is ever likely to solve this knotty problem will be when some enterprising foreigner locates "pay-dirt" or some other valuable product in that unknown land, and starts a stampede for the new El Dorado. Then through recourse to arms, in which the savage tribes will probably play no small part, the interested countries will fight the question out; each in turn will endeavour to obtain the support of the Jívaros,

supplying them with firearms and boatloads of "junk," and each in turn will be betrayed by them; after years of bloodshed and intrigue, the savage native who had been trained and bribed by each white combatant in turn, will turn on his white brother and drive him out, because of the great gulf that is fixed between them. No comparison can be drawn between the difficulties of any campaign of a similar nature yet known to history, and those which would have to be faced by an invading army in these interminable swamps.

The attempt to found the colony of Borja, starting under the most favourable auspices, failed dismally. Men were found who were ready to embark with their families for this new Garden of Eden. Transport was provided in the shape of river-steamers, which were to be run on a regular six-monthly service, to continue to furnish them with food and necessities after they had built their new homes until such time as their crops materialized. At the commencement the enterprise was successful. The foundations of the town were laid, the first houses built and the first crops planted. At the end of six months the steamer arrived to find a flourishing little community of some hundred souls. But that was the last chapter of the known history of Borja. The next boat turned the last bend in the river to be faced by empty ruins and wood-choked clearings. The *Huambizas* from above the Pongo had paid them a visit.

The site had been remarkably well-chosen, as we could see when we landed. The great boulders of which I have spoken formed a natural breakwater, which prevented the erosion of the bank. Through the centre of the town ran a delightful mountain-stream of crystal water. There was a good landing-place at the edge of the town, with deep, quiet water for a steamboat to lie at anchor.

As we chopped and hacked our way through into the

"town," we were surprised to see numbers of limes and orange-trees, the former still bearing good fruit. No traces of houses were to be seen, however, except here and there orderly piles of earthenware dishes and pots showing where they had stood, and an occasional hard-wood post still standing (one more proof of the enduring quality of this material). A solitary stone hand-mill, for the grinding of corn supposedly, was the only other relic of civilization which had survived the ravages of the tropical climate.

And so we stood and surveyed the scene, the first white men, as far as is known, to penetrate to the site of that dismal page of Peruvian history, since the disconsolate skipper of the steamboat which was to bring back the news to Iquitos turned the nose of his command down-stream.

CHAPTER XV

THE PONGO MENSERICHE

Snags—Forest calls—A killing weapon—Concentration—A reconnaissance—The great whirlpool—A glimpse of history—We seize the only chance—We get what we deserve—Crawling—Salvation.

In accordance with our plans we turned back that same evening, July 19th, 1899, and headed for Mitaya Isla, leaving all the stores which we had taken up with us "cached" in our new base on the right bank just opposite Borja. (The latter, by the way, is marked out on most maps to this day, plain proof of the mystery which surrounds the whole region, and the little that is known of the details of this, the greatest unexplored tract on the face of the earth.)

An hour and a half of steady pulling with the current took us over the whole distance which we had toiled to cover for three long days. We realized more vividly than ever how great had been the obstacles in the way of our progress. A bright moon showed us the way, and, what with the relief of going with the stream after struggling against it, the delicious coolness of the night air, and the satisfaction of having had a glimpse of the Pongo, we were light-hearted.

Night-travelling in canoes with a strong current to keep your pace at about 10 knots is no sinecure. I speak of narrow rivers, of course. The Marañon, on this stretch which we were now covering, has an average breadth of some three hundred yards—a mass of live, boiling water, swirling round rocks scattered at random,

tearing angrily at the fallen trees (among them some of the giants of the forest which have caught in the uneven surface of its bed in their headlong scurry to the sea), bounding along with a roar and a hiss like an express locomotive. There would be stretches of smooth water at times, with just the steady rush of the river to break the silence, that low whispering which always rises from moving water. As for the pace, that can always be ascertained more or less accurately by using the bottom of the canoe as a sounding board; when the current is swift, the constant rolling of the stones along the bed of the river is transmitted to the canoe by the medium of the water so plainly that their movement sounds to one pressing his ear against the bottom as natural as if it were taking place close at hand in the open air. The heavier the stones which are being moved, the swifter the current. Behind this noise, as it were, forming a background to the irregular bumping of the rocks, is the ceaseless erosion of the sand, as it scours the ever-shifting bed of the river. Where the river is deeper, more sluggish, and free from rocks, nothing but the steady hissing of the sand can be distinguished.

Steering between the "snags," some of which rear themselves to a height of eight to ten feet, rising and falling with a constant vibrating motion as the current whips them, is that which makes night-canoeing perilous.

The eddies and currents which set in all directions make the craft move with more leeway than headway as often as not, with the result that a "snag" which appeared to be at a safe distance on one side or the other of one's course, suddenly looms up straight ahead and threatens instant disaster. It should be realized that many of the "snags" are not merely odd branches, but trunks of hundred-foot trees, whose roots are caught and held in the boulders; a blow from one of these suffices to break a

canoe in half, or lift it bodily in the air. And so, much vigilance and care is required, for the cargo is irreplaceable and therefore invaluable.

As we slid along in the moonlight, keeping to the swiftest channels, as often as not we were within earshot of the bank. Gliding along on the lookout for fallen trees, we heard the call of the *tuta-cuchillo,* a single round, soft note repeated once, as it skims through the upper branches in search of wild fruits. This monkey follows the habits of the owl, in that it is a night animal and abhors the sunshine. And then the plaintive call of a bird, a call peculiar to this country and distinct from that of any bird I know of which inhabits civilized lands. It consists of five notes, uttered in as many seconds, a descending "scale" of neither tones nor half-tones, nor any other recognized musical intervals; the whole effect is weird to a degree, and only makes more lonely the lonely night-watches. I have heard the call from one end of the Amazon country to the other, but have never been able to discover from what particular species it comes. Perhaps it is an owl, but these birds are so elusive, that I never saw but one during all my six years in the woods; he was almost white, and only stood six inches high. The English naturalist, Bates, thought it was the call of some kind of warbler. Waterton evidently heard it too, for he speaks of the "tolling" of the Bell Bird.

Then comes the answering call of the *paujil* (the Inca name for a kind of large black turkey). I think this must be the strangest cry that ever came from the throat of a bird; indeed, one unaccustomed to the noises of the forest would take it for the distant lowing of a cow, or even the bellowing of a bull-buffalo. From a distance of several miles on a still night, it floats from bank to bank, a low booming note, followed by a sharp

grunt. Always during the brief twilight between sundown and darkness—a short half-hour in these parts—does this bird break the silence. In strange contrast comes the tremulous whistle of the *yungaruru* (a magnificent pheasant-like bird—*Inca*), long drawn out, and plaintive, repeated twice, and falling away half a tone the last time. From time to time a tapir, sportively inclined, or perhaps chased by a *tigre,* comes crashing through the undergrowth and dives into the water in a blind rush which heeds no obstacle, be it man or canoe. By some strange freak of nature these huge, ungainly, 600 lb. beasts are endowed with the power to make but one noise, which might be the chirp of a wren!

And so, moving down-river stealthily to the accompaniment of the forest voices, we turned a bend to find ourselves facing a camp-fire, only one hour and a half, as my Journal records, after pushing off. The sight almost pulled us up short, so unexpected was it, and so incredulous were we of the distance we had covered.

We found all well on Mitaya Isla. The three inhabitants had benefited by their rest. So we settled down to the business of transporting the remainder of our kit to the mouth of the Pongo, obviously the first thing which called for our attention. It will be remembered that we had left a certain amount of baggage further down-stream still, so the trio which had rested during our first trip up to the Pongo went off with their light canoe to fetch it up, leaving us to a few days' hunting in the island. I remember those few days chiefly by having lost my pants, and run up against a *tigre,* armed with an *escopeta* of the common "trade" variety, a shot-gun which had once had two barrels. It then had half a barrel. The other one and a half had been blown off long ago; the half went on one memorable evening when I stalked a duck for dinner; I shot the duck, not

only with the charge, but also twelve inches of barrel. (I believe that in the days of the Napoleonic wars, this would have been known as "bar-shot".) The whole barrels had been missing ever since the man who sold me the gun, Dr. Jones of Iquitos, tried to demonstrate the efficacy of smokeless powder, shortly after taking my money. He had a narrow escape, and I'm sorry. After watching half the gun fly over his left shoulder, he handed me back what was left, with the assurance that "it was still a killing weapon." I thanked him, and told him I fully realized that it was sure to kill something.

Well, as I say, I lost my pants. The circumstances were tragic. I was swimming the river, with that same unique weapon, and endeavouring to keep it, as well as my pants, from getting wet. I should have done far better to concentrate my attention on the latter, which were really the more valuable of the two. After landing, still grasping the wretched gun, we (Jack was with me at the time) were roaming round the woods, looking for what had really been the object of the expedition, some turkeys which had settled in the trees thereabouts. We were brought down to earth by the roar of a *tigre* (quite as impressive a noise as any lion can produce) not more than fifteen yards away. After mature reflection, I have come to the conclusion that the animals sense of delicacy was affected by my unseemly appearance for no sooner had we taken a pace toward him than he slunk off.

I find in my journal a note by Morse—the last word of that stirring episode: "I've found your damned old pants stuck in the mud. I've filled them with turtles' eggs, the best thing they ever held!"

Several trips were made by the two parties into which we were now divided during the succeeding month of August, without accident. Morse and his companions were caught below Mitaya Isla by high water. (The

rising and falling of the rivers succeed each other with startling rapidity, owing to the heavy showers, and the sodden state of the ground; I have known the Upper Yasuní to multiply itself by twenty-five in one hour.) They lived for eight days on nothing but turtles' eggs. Speaking of provisions, by the way, it was during this period that we saw the bottom of the hardtack barrel —the last few biscuits had whiskers on them two inches in length. Finally we all arrived with the last of the stores at Borja on September 4th, a great day, for we were ready at last to attack the Pongo Menseriche.

On the site of Borja we erected a permanent camp, clearing about an acre of land and leaving only the fruit trees standing. Uncertain as to whether we should ever return this way at all, we did not leave much behind us. Here we planted Indian corn and *yuca,* the corn to be ready in three months' time, the *yuca* in six. We had seen no signs of the head-hunters as yet. There had as a matter of fact been no record of their having been below the Pongo since the last raid on Barranca and for a number of years before they had not been seen at all.

Before we had been there twelve hours, three of us made the first reconnaissance of the canon. I will refer to my notes for the impression that it made on us:

"Ed., Game, and I explored the Pongo in the small canoe. Our little craft was tossed about like a feather by the whirlpools and eddies, but was kept from being dashed against the walls by its very lightness.

"The direction of the main current in the Pongo is not distinguishable at first, appearing to flow up as well as down-stream. Being but thirty or forty yards wide, the water must be tremendously deep, as the river above and below is ten times this width." (On glancing through my notes, I see that in another place I assigned to this mighty gorge a height of 1,000 feet, which was the best

estimate I could make. From above it appeared deeper still, but owing to its narrowness I should not care to trust to that impression.)

The chief trouble with the Pongo was the manoeuvring of the corners. The current in the centre was of course down-stream and very strong, but those at the sides were up-stream, and very nearly as swift; the latter must have been formed by the terrific backwash resulting from the pressure of the main stream against the solid resistance of the walls of the ravine, where it was forced to turn abrupt corners by the sharp zig-zagging of the cañon. By careful manipulation, these currents carry a canoe up-stream with great rapidity, but the moment a corner is reached the trouble starts; to get round that corner and reach the safety of the stretch of unbroken water requires great care and an experienced hand. Then again there are the whirlpools. Of these there are many, with one standing out beyond all the rest. This latter may even be compared to the famous Whirlpool Rapids below Niagara Falls. (I shall refer to it in detail below.) Altogether, then, the Pongo Menseriche presents a very stiff problem in navigation. The lighter the craft, the easier the task, for the vortices of the pools may be negotiated by swift strokes, which would be wholly impossible in a canoe of the build of the *Exploradora,* which weighed several tons.

The great whirlpool fills the whole cañon at one of its widest points. It must be fiftv yards across. I have viewed it from every direction (except from underneath) and consider it to be worthy of some attention before passing on through the ravine to the country beyond—our Promised Land.

On our first excursion we made no effort to circumvent it; two or three narrow escapes from capsizing in the lower reaches warned us of the dangers of the cañon

at certain states of the water. We penetrated to within a short distance of the great pool, but the sight of the whirling mass of water, revolving round the great chasm which seemed capable of sucking a whole steamer into the unfathomable depths, was enough to damp our ardour for the moment. The first glimpse of a dangerous undertaking is, I think, always the worst. It is only when you have taken a second and a third look at the enemy, and carefully weighed up the chances, thus depriving him of his strongest weapon, surprise, that you are capable of deciding whether or no you will attack him. And so it was with us. Our first sight of that prodigious obstacle to our progress was singularly unproductive of a desire to paddle to within reach of its grasp. We retired to think it over.

Next day a journey up the hill which forms the northern side of the cañon was undertaken, with the object of finding a place where we could scramble down to take a close look at the pool from above. We succeeded. We located a narrow cleft in the precipitous wall of rock and clambered down to within twenty or thirty feet of the highest point to which the water was rising. (The significance of this remark lies in the fact that the water was at this point continually heaving up and falling away, as though the whirlpool concealed some gigantic pair of lungs, with a rise and fall of at least twenty feet; this motion was only noticeable when the Pongo was very full; under such conditions, there would have been no chance whatever of making the passage.) So there we stood, gazing straight down into that infernal vortex, wondering whether we should ever see the country that lay beyond. We could do nothing, nor ever would be able to do anything; we were hopelessly dependent on Nature to help us out. We were awakened from our reverie by a practical demonstration of the fate that would under-

take man, beast, boat or any other floating thing that might be drawn within the grasp of that hungry maw, whose lip nothing can escape. Shooting down the cañon came a giant *guayacan* (a near relation of the true hardwood trees which will not float); it must have stood a hundred and fifty feet before the water had eaten away the bank wherein it was rooted, and it had toppled over like a ninepin, to be swept, perhaps, hundreds of miles, and finally to be caught in the boulders and form yet another "snag." On it came with tremendous momentum, almost enough to carry it past the fatal spot; but not quite, for it was caught and held by the swirling water, and in a moment was careering round the pool, sweeping both sides of the cañon with roots and branches, as if in a vain attempt to save itself. Three or four times it circled, each time a little nearer the centre, until at last with a heave of its great length, it reared its head straight up, revolved in the very centre of the pool, and was sucked from sight. Clean straight down it went, and was swept from the radius of our vision without again breaking the surface.

At the end of a week's reconnoitering and waiting for better conditions, luck favoured us. We had no useful information concerning the Pongo on which to go, of course, for unless the inhabitants of Borja made some expeditions up through it, into the Huambiza country for which we were ourselves heading, it is doubtful whether white men had ever steered a canoe from East to West through that stretch of water before. As for the down-stream passage, history records two occasions at least on which it was attempted. The first white man to cover the ground was Don Juan Salinas, a Jesuit priest of Ecuador, who descended the Santiago from the vicinity of Cuenca and Loja in 1557, and who described the cañon as "A frightful series of torrents and whirlpools." More than

three hundred years later, in 1870, a certain Wertherman came down the Marañon with a party on three rafts. He too shot the Pongo Menseriche. His impression of the cañon was "A huge rent in the Andes, with precipitous sides 2,000 feet high, seeming to close in at the top." (*The Encyclopedia Britannica* speaks of his trip as "One of the most daring deeds of exploration ever known in South America.") Without wishing to detract from the value of Mr. Wertherman's report, I must confess that the cliffs did not strike me as being quite so high, nor did I notice the tendency to close in at the top. Perhaps he had more time at his disposal than I had. There was current, of course, a certain amount of more or less vague information to be picked up from the 'Aguarunas but its practical value, as may be imagined, was very small. So we were left to our own devices.

On the seventh day the water had fallen considerably, and it was decided to send our advance guard through the cañon in the light canoe (a twenty-four footer) with ten days' rations, to get into touch with the Antipas, who would supply us with fresh fruit and vegetables, and help us to do what we could never have done by ourselves—paddle the heavy *Exploradora* with all our stores up beyond the Pongo.

So Game and I set off on the 6th of September with a plan for passing the whirlpool which was the result of our several reconnaissances. Working hard all day, we covered the three miles of water between Borja and the centre of the Pongo where the pool is. In the late afternoon we approached it. To our way of thinking, there was only one solution to the problem of passing that spot, even when the water was reasonably low, as it was that day. We approached cautiously, clinging to the northern side of the ravine; to make the last and the worst corner before the pool, we had to clamber out on to the

ledges of rock which gave a precarious foothold, and ease the canoe round by means of poles and a rope (when empty, it floated in two inches of water); at last we were approaching the rim of the pool itself. Steering carefully into the outer edge of the "basin" we let ourselves be carried round the rim—the first stage of the process of being sucked into the chasm of water which stared up at us like some Evil Eye. Then, as we swung round toward the southern cliff, we had to paddle hard to avoid destruction at the hands of the boiling pot which was created by the rush of water lashing itself into a toppling wave against some rough boulders at the base of the wall of rock—a pother of foam and currents which spelled certain disaster. Swinging clear, still carried round in the outer race of the whirlpool, we shot within landing distance of a sandspit which lay at the mouth of a small ravine at the very southern edge, forming the only place in the whole length of the Pongo (five to six miles) where it is possible to get ashore with safety. I say within landing distance, but it was only thanks to Game's unconquerable spirit that we reached shore. He sprang from the bow into the rushing water —well out of his depth it was—and struggled ashore with the rope. Lodging himself between the rocks, he succeeding in arresting the flight of our canoe as it swung round at the rope's end, and dragged her into safety. The presence of sand at such a place is due to the protection of the boulders among which we landed, which keep the small spit behind them intact from the attack of the water; at some time, no doubt, the very force of the current ate away the southern wall, which, its strength undermined, fell into the stream and so formed the ravine and the miniature *playa*. At all events there it was—our salvation. For it should be understood that the only chance we had of making the Western mouth of

the Pongo was to tackle the whirlpool in the way we did; to creep up under the Northern face was out of the question, built as it was of smooth, shining rock which offered no hold of any kind, whereas, once landed on the Southern edge, it was possible to make the passage by working up-stream from that point under the shelter of a ledge of rock, which broke the main force of the current, and protected a moderately quiet backwater.

Here, then, we camped for the night—an ideal spot. (As we shall return later onto the same camping ground, I shall leave its description until that time arrives.) Next morning we were up early, and slunk out behind that blessed ledge of rock, and made our way during that same day to the freedom of the open water beyond the canon, fighting up-stream with pole and paddle and rope, dodging from one eddy to another, creeping round corners, pushing and pulling.

At this point in my narrative, I cannot help reflecting how fortunate we had been up to that memorable day when we paddled clear of the Pongo. Trouble, of a serious nature, lay ahead of us; but when one comes to think of it, it was only what we ought to have expected; the plain fact was that we had been far more in luck's way than we knew. Trouble is the common lot of those who go off on such foolhardy expeditions as that which we, in the way of all men when wild spirits are gathered together, undertook. We had no right to expect anything else. But we did—that is certain. For when evil days fell upon, we did not stop to think of all the good fortune we had had, but cursed the goddess who had so cruelly forsaken us.

On the first day which we passed in the head-hunters' country (one cannot assign it to any civilized government!), things went tolerably well. Progress was slow,

however, the river having become difficult to navigate; here its bed was stony and rough—a mass of shingle for the most part. Scattered with shallows, and full of cross-currents, it no longer gave us a chance of unbroken paddling; we were able to pole a good deal, it is true, but as often as not, the stream was too strong for either method, and we were reduced to pulling our craft over what seemed endless stretches of bad water. Little by little our feet gave way under the constant soaking and chafing of the stones and pebbles; they swelled and became more tender as each hour passed; cut to pieces and finally completely skinned, they became almost unbearable. And yet there was nothing to do but push on, for we were not anxious to return to camp with our mission unfulfilled.

And so, with the country becoming more difficult every day, we staggered on for a whole long week of misery. There was no game to be had—the woods seemed to have been swept clean of living things. Having taken much longer to make the inhabited zone than we had anticipated, our food supplies became lower and lower, until the last tin of *chocolat-au-lait* disappeared, and we were left with nothing but salt. All our efforts to discover one single sign of human life—a bit of charcoal among the flotsam of the river, an axe-mark on a tree, or any bit of wood that looked as if it might have been touched by human hand—failed with a dismal monotony that bore us down to an indescribably gloomy state of mind. On the sixth or seventh day of that funereal trip, I managed to spot and shoot a capibarra, the only living thing we had seen for what seemed years. We salted and smoked it, but its flesh was revolting to me; even the pangs of hunger could not drive me to eat that beast with any relish; it appeared to have been soaked in some very cheap, rank

perfume; one would have imagined that it was a carnivorous beast, so pungent was its meat. But it kept us alive somehow for three days.

Finally we simply *could not* stand up at all either in the canoe, or out of it. There was but one mode of progress left—crawling. So we crawled, in turns. One of us would hook the rope-end round his waist and, having scrambled to the bank, would crawl along on hands and knees, dragging the canoe painfully up-stream, ever so slowly, like some poor old broken-down drag-horse on the towpath of a canal, while the other held it off the rocks with the pole. Unable to touch earth with the bottoms of our feet, we made wretched progress. Game's tough spirit bore him up through it all, however, until on the afternoon of the tenth day, we arrived at the beginning of a long straight stretch of water where we should be able to paddle for several miles without interruption. We sat and gazed up-stream as far as the eye could see, where the river made a bend to the right. Turning to each other, each saw what was in the other's mind—the same thought. Almost as one man we voiced it.

"If at the end of this stretch there is nothing, we turn about."

We had reached the limit of our endurance, worn out by hunger and pain, and worst of all, disappointment. For days we had cursed our luck, but it seemed that it was never destined to change. We were down and out.

It was in no optimistic frame of mind, then, that we set ourselves wearily to paddle what was to be the last four miles or so of that attempt, whether it failed or succeeded. There seemed no reason why it should succeed, for the complete absence of a single sign of human life was enough to convince us that no men were to be found so close.

We had not paddled for more than an hour when we

came to the commencement of the bend. As it gradually unfolded itself to our view, we noticed a sheltered creek on the left bank which had not been visible before. A few strokes more and it was in view. On the hillside above, some two hundred yards from the bank, a bright yellow patch among the dark-green forest, stood a Jívaro shack.

CHAPTER XVI

DIPLOMACY

The call to arms—A concert—Negotiations—Liquid refreshment—Three matches—The Antipas—The "Pongo Chapter"—Lazaro parleys—Paddles—Bananas—A pact.

THE sight of that hut on the hillside was as good to us as water to a man dying in the Sahara. We felt a new strength, and the word "fear" had no meaning for us. All we thought of at that moment was that there lay our goal, a few hundred yards ahead. Of the difficulties and dangers which lay in our path, not one thought crossed our minds. To push ahead was all that mattered.

And then we saw human life. Four Antipas, long-haired and stark naked, were crossing the stream ahead of us in a dugout. Indifferent as to the effect it might have on them, we gave a yell, in which was voiced all the pent-up joy which was in our hearts at meeting our own kind after the weary search which lay behind us. If we had stopped to think a moment, we should have realized that a whoop such as we let fly could carry but one message to a Jívaro—war. Those four in that dugout did not even stop to turn their craft. They stood up, faced about, and paddled hard astern for their lives, throwing the water eight full feet into the air, and racing for the left bank where (as they thought) safety lay. No sooner had they landed than the *Boom-boom, Boom-boom* of the call to arms came floating across the water to us, to be taken up in fifty settlements all round the country. Clearly it was to be war. Little we cared, however—not because we were particularly brave, but rather particularly hungry. And after all,

approaching on the water and armed with Winchesters, we had little to fear from spears. Following the flying dugout, we came upon some twenty more pulled up on the beach, and we made our way to the landing-place and hauled ashore. Then broke out a storm of war-whooping and howling which beggars description. The object, of course, was to impress us with the idea that we were faced by innumerable warriors. There was nothing, or almost nothing, to be seen of the savages, sheltered as they were behind the thick palisades of split palms which surrounded their huts and which could be guaranteed to stop even a bullet from our rifles.

But we had not come for war, and somehow an end had to be put to this clamourous deadlock. There seemed no end to the capacity of those Jivaros' lungs. For three long hours they yelled, with varying intensity. At times I would start up the bank in an attempt to get into conversation, but each time they took it for a hostile movement on our part and redoubled their efforts to persuade us of their strength.

The spell was broken in the end by my leaving my rifle with Game in the canoe and walking slowly up the trail which ran up in full view of the barricaded house nearest to us, suffering agony from my raw feet, but managing to cover the ground by reason of the soft sand. It was not more than a matter of fifty yards all told. I had gone a little more than half-way (with my six-shooter slung out of sight) when there emerged from the hut three quaking youths. The unfortunates had evidently been chosen for a parley much against their will, for I do not exaggerate when I say that their knees would barely hold them and their "walk" resembled that of a man sick of the palsy. Indeed I was convinced at the time that they were really sick—that perhaps some disease had swept through the whole tribe of Antipas. I tried to

open the negotiations in Inca, in Spanish, and with every odd scrap of every language at my command, but all to no purpose. The Jívaro dialect was at the time unknown to me. I then attempted to calm them by offering my hand. The custom was evidently unknown to them for they searched my palm attentively to see what present I might be bringing. Finally I resorted to gesture—motioning them to the canoe as if to invite them to see what we had. They were for making me go first, but it is a safer rule to go last. So down we went in single file to where Game was sitting with his rifle across his knees, nursing his feet. We had been careful to bring with us an assortment of trade-goods—a few beads, some small round looking-glasses, and (most successful of all) a supply of their own particular brand of poison. This latter we carried in sections of bamboo cane, about an inch in diameter and six inches long. The poison is poured in after removing one of the knots or partitions which grow at regular intervals, and the cup thus formed, when full, is closed with a palm leaf tied down with a strip of bark; the latter is put on green, and when it dries it automatically tightens up, sealing this natural receptacle as securely as a jam-pot.

Once they began to take an interest in the presents, things went swimmingly. Little by little the howling of the tribe in the huts behind the undergrowth had died away, open hostility gave place to confidence, more and more savages slipped down to the canoe to see what we had, urged thereto by their companions who had already done so, and little by little friendly relations were established. Finally, their curiosity, nursed by the evident delight of their men-folk at the treatment they were receiving at our hands, overcame the women of the settlement. Down they came to the bank, each one bearing an enormous gourd full of *giamanchi*, first in one and twos

and then in one great stampede. The etiquette in connection with the welcoming of guests, be they friends or strangers, is rigid and extremely burdensome to one whose stomach is not accustomed to receiving unlimited gallons of liquid. A rough estimate proves that there must have been presented to us in all some 600 gallons of *giamanchi,* all of which we were expected to drink if possible. If not, we were at any rate bound to taste each one of the gourds which were brought down to the river by the some 300 wives of the numerous warriors who were assembled on that beach. For refusal to accept food at the hands of any one of the women, who represent their lords in this ceremony, is sure to incur grave displeasure. After the tenth drink or so Game, who was of a distinctly independent turn of mind, began to protest to me in no uncertain terms that he would "see himself dead before he would touch another drop." I implored him at any rate to go through the motions of imbibing, to which he eventually allowed himself to be persuaded. And so we solemnly raised every one of those nauseating receptacles to our lips, and were at peace with the Antipas.

We were flooded out by the human tide. They clambered into the dugout, delved into everything they could lay hands on, and behaved generally like a crowd of school children to whom the free run of a candy store had been given. They chattered, grinned and gesticulated; they held our trumpery trade-beads up to the light and tried the effect of wearing them; they gazed spell-bound into the hand-mirrors which we had rightly regarded as one of our strongest lines; and finally they were completely overwhelmed by the shoddy striped cotton shirts which the favoured few among the men donned with all the exquisite satisfaction which a youth fresh from school experiences when first he puts on a "swallow-tail."

So the ice was broken. But no conversation had taken

place as yet, for conversation was impossible. We found that the language spoken by the Antipas was quite unintelligible to us, and that *Inca,* the only Indian tongue I knew, was unknown to them. Progress was made, however, in the sign-language which is common, to a greater or lesser degree, to all men. They made it clear to us that they wanted a token to send to their chief, a sign whereby the truth of their incredible report of the arrival of white men in the land might be impressed on him; seeing us using machetes they seized on them as serving their purpose well. Three they sent by special envoy to the Chief, and three more they sent a little way down-stream to a point where there was a trail along which he might be expected to pass if the envoy missed him; there the machetes were stuck into the earth as we pile arms in the field. He would be sure to see them, and would be put on his guard.

And so we sat down to await his arrival.

At this point a few words about this tribe will not come amiss, as they played such an important part in our personal history during our search for the Inca gold, and are, indeed, one of the only six known head-hunting tribes of the Amazon zone, grouped under the common name Jívaros, the others (all their enemies) being the Huambizas or Pantecunas, the Aguarunas, the Muratos and the Zaparos. To form an estimate of the relative strengths of these peoples is more than I dare attempt; their migratory habits and their custom of living in small scattered settlements hidden in the dense jungle makes it an impossible task. Indeed, one of the main points of their policy is to conceal from one another not only their whereabouts but also their fighting strength, even going so far as never to use the same trail twice, if possible, in approaching their homes. For these reasons an air of complete mystery surrounds the whole region,

and the casual white invader stands no chance of obtaining accurate statistics.

The personal appearance of the Antipas is briefly as follows: The men are shorter than we are, averaging about 5 feet 6 inches, are muscularly built, and many are covered with the scars of spear wounds, the marks of warfare; they are swifter of foot than we, compare well with monkeys in agility (they are wonderful tree climbers) and are all apparently well-nourished and well-conditioned. From childhood up they have their front teeth filed to a sharp point and coated with a jet-black shining vegetable pigment which produces the same effect as nitrate of silver. The hair on the top of their heads is the only hair on their bodies, but that is magnificent. It falls on an average to their waists, sometimes even as far as their knees, is jet-black, straight and glossy. They wear it flying loose like a thoroughbred's mane before it is cropped, only occasionally winding it round their necks as, for example when they are weaving or cooking; and coiling it on the tops of their heads, as a Turk would his turban when travelling or hunting in the forest. They seldom adorn it with feathers or other ornaments. Their skins are more chocolate than red-brown. Technically speaking, they cannot be described as "red-skins" under any circumstances; occasionally we met with signs of their having mingled with the colonials of Borja whose women their ancestors carried off into captivity. Their eyes are invariably black when uninfluenced by this intermarriage with the white race. We met a few with a trace of whiskers. Their toes are splayed like those of all bare-foot savages, and they make considerable use of them as secondary hands.

They are singularly free from the love of personal adornment which is a characteristic of nearly all savage and semi-savage people. Indeed there is only one orna-

ment which they wear, a small tuft of toucan or stork feathers fastened to the lobe of the ear. Furthermore these are worn but infrequently, that is to say for battle or on the occasion of great festivals; finally, the wearing of these feathers is a sure sign of the owner's prowess in the hunt, for to kill either bird with their only means of bringing down game, the blow-gun, is proof of great skill and strength; the toucan always lives among the topmost branches of tall trees and the stork is equally shy; we could never approach within 500 yards of the latter.

As for the facial characteristics of these men they resemble the Mongol type far more than they do the North American Indian; the form of their face, their eyes, and the lack of hair on their chins are reminiscent of the Chinese.

They are given to tattooing themselves, but only to a limited extent. They mark their limbs with simple little designs—a cross, or a circle, or a wavy line; they never indulge in the showy designs of races such as the Japanese who have brought this form of ornamentation to a high art. The process is simple. With a thorn they prick the required pattern on their skins, drawing blood; they then hold a lighted piece of crude rubber under the prepared area until it becomes well sooted from the black smoke given off by the rubber; finally, they rub the soot into the wounds, and blue marks similar to powder burns are left in the skin. Where they learned this art, I do not know; it would, as a matter of fact, appear to be indigenous. The contrary being the case, they would be more likely to make it a universal practice and to show signs of an exterior influence. When called upon by the medicine-man (the Antipas, as far as I could discover, only had one) to tattoo him with some distinctive design, the first thing which occurred to me was the

Psi Upsilon badge of the fraternity to which I belong. If any of my fraternity-brothers ever make their way to those parts, they will probably be greeted by a large and flourishing new Chapter (let us call it the "Pongo Chapter"), for the idea appealed to the tribe so strongly that, within a few months, the design had been copied with considerable skill by quite an appreciable number of warriors. I assured their chief that should he meet any "member of my own tribe" and show him the sign which he carried on his arm he would be received with open arms and greeted as a brother. Incidentally, we happened to leave a packet of the well-known "L.L.F." brand of cigarette papers lying about; shortly after, we found an excellent replica of the three letters tattooed on a savage; while we were there, we noticed quite a few who had joined the *Lamda Lamda Phi's*.

Passing on to the women of the tribe, there are a few outstanding characteristics to be noted. Their hair is not allowed to grow much below the shoulders, in direct opposition to our own more modern practice. They stand about 5 feet 3 inches on an average, are well-built and strong, move with the grace of a jaguar (I select this animal as being a native of the same woods), and are as much at home in the water as on the land. They do all the packing when the family is on the move, being capable of lifting 100 lbs. to their shoulders and moving through the forest with perfect ease. As for clothing, the men wear the loin cloth when out hunting or fighting or on any special festival, but seldom when in their own homes or in wet weather. The women, in addition to the loin cloth, wear a blouse in the form of a square piece of cloth with a hole cut in the centre for the head; this garment is tied round the waist with a fibre cord. The material for the clothes of both sexes is a fine cotton "homespun," woven by the men, composed of thread of

various shades dyed with fast colours produced from the leaves and barks of the vast storehouse of the woods.

To take up the tale; we had not to wait more than an hour for the arrival of the chief, a fat, sleek, cunning-looking old thief, who greeted me as his Christian brother and produced a small piece of paper, carefully protected from the elements by a palm leaf, on which was written in ink the name "Lázaro." He professed to have been baptized by a Jesuit priest at Macas (where we were destined to go ourselves within a few months). The holy water certainly never penetrated his skin, for to the end of his days he was a shameless rascal, no better than the rest of his kind.

His arrival saved the situation, however, for he spoke Inca (known among the Jívaros as "the white man's language," curiously enough, the reason being that it is spoken at all the points of contact between the savage tribes and the outposts of civilization). We always imagined that he owed his chieftainship to the fact that he had lived with the priests, and, later, answered the call of the wild, returning with a wider knowledge of the world than any of his fellows possessed.

He was full of interest concerning our movements. Where had we come from? What were we looking for? Where were we going? Had we any companions, and, if so, where were they? We were subjected to a brisk catechism. Well, we told him we were looking for gold, that we were going up the Santiago (known among the Indians as the Pauta), that we had a camp just below the Pongo, and, above all things, that our camp was one vast treasure-house of presents, such as those we had had the pleasure of giving to his subjects. Indeed, it was a source of great sorrow to us that, owing to the bad going in the Pongo, we should be unable to bring them up . . . a pity, for they were certainly a very fine col-

lection . . . . No, no efforts of ours could overcome the difficulties of navigation in the cañon, with so many heavy dugouts laden with merchandise destined to enrich his people . . . Yes, a great pity, for we had brought them up from many moons distance expressly for this purpose, having heard of them from other and lesser peoples who trembled at their name.

Pressed to stay with him as the guests of the tribe before returning, we accepted, lamenting once more that we should be unable to give them some small recompense for their generous hospitality, as our stores were irremediably shut off by the Pongo.

After inspecting their huts, we decided that a small island which lay opposite the settlement would suit us better. It was not that their houses were vermin-ridden. On the contrary, like all naked savages who live in the tropics, they are kept far cleaner than those who have to go clothed, by their frequent immersions in the rivers and by the cleansing action of the sun and rain on their skins.

While preparing our canoe to cross to our new home, Game happened to pull up his trousers to scratch a bite. His leg was a mass of old scars made by the constant scratching of sand-fly and mosquito bites during the first weeks of our expedition. Many of them had been reopened and were infected, the result being a nasty mess resembling a rash. One sight of his leg, and a general stampede set in. The whole tribe disappeared. In a moment it became clear to us that they feared the small-pox scourge.

It was with the greatest difficulty that I persuaded the chief to return to within a few yards, from which distance he could be shown that Game was not a victim of the disease; we had to make a long practical demonstration to convince him, but at last he summoned his

people to return and we made across to the island. The medicine man, the biggest Jívaro I ever saw, jumped into our canoe, having seized a paddle from a neighbouring craft. These paddles are some four feet long, of which three feet is handle and one foot blade, the latter being pear-shaped and from 14 to 15 inches broad at the centre: the action is a short, quick stroke, from 50 to 60 per minute, the blade forming a strong suction behind itself owing to the speed of the stroke. Gripped with one hand close to the water and with the other at the extremity of the handle, these paddles are tremendously powerful. They are made of a very tough, fibrous, yellow wood called by the Incas *remo caspi* (*remo* being the Spanish for an oar or paddle, and *caspi* the Inca for wood). The process is painfully slow owing to the crude tools at the command of this Stone Age people; metals, except gold, are absolutely unknown to them; their axes are of stone, their chisels are of animal's teeth, and the only substitute for the file and the plane which is known to them is sand, with which they get a wonderful finish to their work. The Jívaros call paddles *"canaliz."*

The medicine man paddled us across, then. He was the finest canoeman we ever had. He sent our dugout flying straight across the strong current in a way which the two of us together could never have equalled. His first strokes were so strong that the canoe shot away from under us and we toppled off the thwarts into the bottom.

Arrived at the island, with a dozen Jívaros to build a house, start a fire, and unship our kit, we were treated to a most efficient exhibition of camp-pitching. In an hour a fine palm shelter was constructed with a thick thatched roof and a fire was roaring outside with our few stores landed and stacked. We had supper of roast *yuca*, roast corn on the cob, roast plantains, with peanuts and wild honey for dessert.

The last named dish must have been the ambrosia of the gods; it is delicious beyond description; the peanuts are not cooked, but dried in the sun just enough to remove the raw taste and the honey is pure white and of a fragrance finer than the finest perfume.

That meal was a feast, for we had passed through lean days, as will be remembered.

A word as to the bananas of that country is necessary. So superior are they in taste to the varieties which reach our markets that one who has never tasted the fruit fresh from the plant can have no conception of its quality. The largest, the plantain, is about 16 inches long, and correspondingly thick; it is always eaten cooked. The plantain has, of course, great nutritive value, and is, indeed, the staff of life in the American tropics. Not only does it form the *sole* support of millions of human beings for months at a time, but also of their cattle and domestic animals, even down to the chickens. The smaller varieties are exquisitely flavoured; when the skin is peeled off in the raw state they give off a strong, delicious scent as does a tangerine.

After supper we settled down to rest. Such was the confidence which we had been able to establish in those few hours that the savages slept peacefully round the fire all night unarmed. Game and I endeavoured to do guard duty in turns, a Herculean task after so exhausting a week.

Resting, nursing our feet, eating, chatting, and waiting, we passed four days on that island. Our feet were skinning over again, helped by the freedom from the constant soaking to which they had been subjected.

Bit by bit the leaven of our carefully chosen words was seen to be working in the minds of the Indians. From time to time the chief would bring up the subject of those presents, with childish inquiries as to the size

of the hand-mirrors and the colours of the beads. Had we made him a direct proposition to come down-stream with us, it is very likely that his natural caution would have persuaded him that we were preparing a trap. We were in a quandary that third night of our stay with him, for the next day we should have had to go back to camp in any event, having arranged with the others to return within fifteen days at all costs if alive and free. We were debating as to whether we should openly propose to "Lázaro" that he should accompany us with a party of canoemen, when we saw him putting off in his canoe to come over to the island.

He landed, came straight over to where we were sitting by the fire, and sat down. A few minutes' talk brought him to the real purpose of his visit.

Why could not this difficulty about getting the presents through the Pongo be overcome by him going down with us with some of his expert river-men and helping us?

We jumped to our feet. What fools we had been never to think of that way out! . . . How brilliant an idea had occurred to him! . . . . Why, at one blow he had solved the whole problem, and his tribe would reap the benefit of his astuteness. Most certainly! We had never thought of such a thing, but would avail ourselves of his offer. When should we start? The sooner the better, after all; on the morrow? . . . . Right. We would waste no time.

And, although it was never sure whether we should reach the Pongo with any Antipas until we were actually under way and, what is more, out of sight of the hut-ments on the bank, it is a matter of history that we did. For next day, without any fuss or ceremony, we bought a sound dugout for one *carisa* of poison, and pushed off with eight canoemen, led by the medicine man Pitacunca en route for Borja and our friends.

CHAPTER XVII

THE ANTIPAS

Agriculture — Building — Domestic life — Spinning — Weaving — Fishing — Blowguns — Poison-brewing — Religion — Canoe-making — *Giamanchi* — Basket-making — Medicine — Marriage — Retrospect.

THERE is so very little known about the head-hunters of the Upper Amazon that I think a short digression on their mode of life will not be out of place. They form an interesting study in that they differ in many respects from any other known savage tribes, and are a living example of the Stone Age Man, one of the very few surviving. The inaccessibility of their country, its fine climate, and the abundance of foodstuffs, animal and vegetable, provided by the woods and rivers, all go to preserve them from the taint of civilization which, bringing disease in its track, has exterminated so many wild peoples. Almost the only literate persons who are in a position to make a record of the lives and habits of these tribes—the Jesuit priests who have established missions in the country adjoining their territory, as for example at Macas, Andoas, and Archidona—appear never to have availed themselves of the chance. They live in the gold-bearing country, and are too much occupied with exchanging blessings for the most coveted of worldly commodities.

It is worth noting in passing, that whereas those Indians (of other tribes) who have lived for fifty years under the influence of the priests at the missions I have mentioned, remain to-day in every respect as ignorant and more superstitious than ever, having acquired merely

the doubtful benefit of a Christian catechism which they cannot understand (and could not have been expected to), those of their brothers whose domains have been invaded by the *caucheros* have in the short space of some two years jumped from stone axes to Singer sewing machines, and what is more important, from sheer barbarism to self-respect. The former, as I know from personal experience, shrink from contact with strangers, under the influence of the priests' teaching (as though they feared outside intervention, which might rob them of some of their influence). The latter are deliberately taught the advantages of steel axes and machetes over stone not, be it said, by reason of the philanthropic instinct of the *cauchero,* but nevertheless with gain to *both* sides. It remains to be seen whether together with the worldly goods and broader knowledge which they have acquired, there has been left among them the scourge of disease. But at any rate their intellectual progress, and, as far as I could make out, their moral outlook have made far more rapid strides than in the case of their brothers who have fallen under the influence of "religion."

The Antipas, then, are semi-nomadic. The year for them is divided into three parts, not corresponding to the seasons as we know them, but to the capacity of the crops which they plant for keeping them alive; that is to say, they have three distinct homes, some ten or twenty miles apart, each with its own clearing (*chacra* in *Inca*), between which they divide their time. At each homestead they plant fresh crops before leaving for the next, living the while on the produce they find waiting for them on arrival, the result of the last sowing. Each crop takes about eight months to mature, on an average. The exception, of course, is the banana-plant, which bears fruit for many years; the old plant dies each year, after bearing one bunch of fruit, but automatically there spring

Photograph taken by H. E. Anthony, American Museum of Natural History

"T'SERIE" A JIVARO WARRIOR, GENIAL IN APPEARANCE BUT TO BE JUDGED BY TRIBAL REPUTATION

Photograph taken by H. E. Anthony, American Museum of Natural History

JIVARO DEMONSTRATING USE OF BLOWGUN

up round the roots fresh shoots which bear the next year.

Living as they do well to the west of the area which is annually inundated, and consequently being free from dependance on the seasons, they can sow at any time of the year, with the certainty of reaping at the end of the unvarying number of months which are needed in order that the crop may ripen. *Yuca,* for instance, is ready in six months; Indian corn in three months; yams (a potato which grows there to four feet in length and fifty pounds in weight) in a year; sweet potatoes, peanuts, and tobacco are also cultivated in large quantities.

If you saw the one-handed stone axes which are the only tools these people have with which to fell the enormous trees, many of them three to five feet in diameter, to make their clearings (often five acres in extent), you would wonder how it were possible to accomplish this feat. It is a feat of patience rather than of skill. The wood is not cut, but reduced to pulp, six or eight men working round one tree at the same time.

The first step in making a *chacra* .s to remove the undergrowth; the soft stems are cut with hard-wood machetes, what can be torn up by the roots is torn up, and the small saplings are snapped off by main force. Then the attention of the workers is turned to the larger trees. A ring is cut round the trunks of all the trees within a radius of, say, a hundred feet of some picked giant, enough to weaken them, and prepare them for the final strain which breaks them off. Finally the giant itself is attacked by a party with axes which works for days and weeks, until at last there comes a day when the great trunk has been eaten away sufficiently for it to crack and fall. But it does not fall alone, for it drags with it all the smaller trees in its vicinity which are bound to it and to one another by an unbreakable net-

work of creepers among the upper branches. With a rending crash, a hole in the roof of the forest is made, and the sunlight pours in. At the same time the Indians pour out, leaping for their lives not only from the falling trees, but from the myriads of ants, bees, wasps, hornets, scorpions and centipedes which have been aroused. Worst of all is the *ituri* (Inca), a dark red ant an inch and a half in length, which stings with its tail the moment it touches flesh, unlike any other poisonous insect or snake in those woods; it does not wait to be disturbed but attacks of its own accord. I have even seen one make its way along the canoe rope, which was purposely passed under the water for a distance of two or three feet as a protection against crawling things. It must have been immersed for a full minute.

After leaving the trees to lie for several months during the dry season, the Antipas fire them, a process which eliminates all the smaller limbs and bush, leaving only the trunks, to deal with which they have no tools. I have examined the stumps of these fallen trees many a time; they resemble in every respect those of a clearing made by beavers.

In the corners of the clearing thus made, the houses are built. The ground having been carefully "scalped," palms are cut down, trimmed of their tops and cut to a length of from fifteen to twenty feet. This particular wood is selected for its durability and strength. For each house six posts are prepared, the two center ones supporting the centre of the gable being some four feet longer than the rest. They are sunk firmly into the ground, at an interval of about seven feet between the centre posts and the corner posts, thus giving the house a width of fourteen feet and a length of about twenty feet. This is the average size for a family of one man and six wives. Sometimes larger houses are built, with

extra supports for the ridge-pole, in which two or three families live together. The framework having been completed by a number of saplings placed parallel on the three main horizontal roof supports (these saplings are technically known as *perlines*) and tied with green bark on rattans, the house is ready for its palm-leaf thatch. The latter is made of many layers of gigantic leaves; split down the centre of the spine and folded over double, six or eight layers bound securely together forming the regular unit of which the thatch is built, and corresponding in wooden houses to one slate or shingle. As in the modern roof, these units are placed to overlap, forming a final thickness of eight to ten inches, which not even a tropical downpour can penetrate. The framework of such houses can last indefinitely, but the roof must be renewed every eight or ten years on account of the inroads of insects; the underside is preserved from the latter by smoke, but the outer layers are exposed to their attacks. On entering by one of the gaps at either end which serve as doors, a somewhat bare interior is seen. The only furniture is beds and meat-racks; the inhabitants live on the floor, squatted on their heels. The beds are made of split bamboo laths supported on posts of the same wood, the whole about six feet long, of which the last two feet are left open; they are some three feet wide, and are raised about eighteen inches from the ground. Each member of the family has his or her own bed. In the open space at the bottom of each bed are placed glowing embers which keep the sleeper's feet warm. The meat-racks of which we have spoken are built to some four feet in height and placed over the fires, keeping the fish and meat outside the radius of the flames, and allowing it to be cured in the smoke. The Antipas have no salt.

Hung round the house, suspended from the roof by

chambira cord are various bunches of bananas in different stages of ripeness, ears of corn, blow-guns, and spears. Tucked into the corners of the roof are stone implements, hand-looms, fire-making tools, and balls of cotton-yarn ready for weaving. Here and there hangs a basket made of *bejuco* (the local rattan, which grows in any size up to a foot in diameter) full of quivers, bamboo cases for blow-gun arrows, tubes of poison (*carisas* as the Incas say), partially woven cloth, paint-pots, small gourds full of fluffy cotton used on the arrows in place of feathers, and all the odds and ends of their simple household lives. In one corner a couple of monkeys and a turkey have been dropped, shot by the lord of the house, and packed to the settlement by one of his wives (no man will ever pack anything except his weapons of war and the chase; it is *infra.dig.*). Ranged round the walls are the "fireplaces"—mere piles of embers without even a hole in the ground—with the grids placed over them. Each wife has her own, on which she does what cooking she is ordered to do. Piled neatly round the fireplaces are the earthenware pots of various sizes and shapes, all with cone-shaped bottoms, the largest the *giamanchi* containers, which are about four feet in height, with narrow necks and a maximum diameter of three feet. These gigantic vessels are fashioned without the aid of anything resembling a potter's wheel; ropes of clay are rolled in the hands, and the sides of the pot are gradually built up from the ground, the joints being filled in and rubbed smooth until the whole is as perfect in shape, as far as the eye can see, as a modern piece. After being sun-dried they are baked hard in the fire. They are never painted with any design, a practice common among primitive potters.

In general the houses are clean, free from bad odours, and kept in good repair. The work is divided very

unevenly between the sexes, the larger share falling to the lot of the women. They do the cooking, spinning, packing, and have the care of the plantations (weeding is one of their heaviest tasks, for they have to fight against a persistent growth of thorny and poisonous plants, which harbour all manner of venomous insects). Finally, their most important duty is the daily chewing of the *yuca* root for *giamanchi,* the standard dish of every household.

The men are before everything else warriors—the protectors of their womenfolk from the raids of neighbours; after that, they are the hunters; and lastly, they are the weavers. Why this last task should be by common consent allotted to them instead of to the women, remains to me a mystery. The latter do the spinning and every other kind of manual labour in the life of the tribe, and yet it is the men who not only weave their own loin-clothes, but also the material for the women's garments.

The spinning and weaving machinery of these people is simple yet very efficient; the cloth produced being woven with a fine thread comparable to our sewing cotton, is firm and soft, in fact very similar to our better grade cloths for men's suits, as far as the layman can tell.

For spinning they use a stick (generally hard-wood, for it needs to be heavy) about eighteen inches long by half an inch thick, slit at the end to a depth of less than an inch, the same end being also cut to a point; at the feet of the spinner lies a basketful of raw cotton. And that is all. The process is to all appearances as simple as the apparatus. Plunging the pointed end of the spinning stick into the cotton, twisting it rapidly at the same time between the fingers of the right hand, the thread is drawn away to a full arm's length, the twisting motion never ceasing; this movement produces the cotton

thread. The arm is then drawn in again, the stick still revolving rapidly in the fingers, but this time in the opposite direction; in this way, the thread which has been spun on the outward swing is wound on the blunt end of the stick on the return swing, giving the stick added weight, and leaving the spinner free to repeat the process and add to the ball of finished thread which has been started. Backwards and forwards flies the stick with incredible ease and rapidity, until the ball becomes so heavy that it has to be removed and stored. The women are so adept and strong that they spin even while packing heavy loads on the trail.

To weave this thread into cloth (this being the only raw material for the purpose known to the tribe) a primitive loom is set up in the ground, composed of two pairs of sticks some two feet in length upon which the woof is wound in an unbroken length in such a way that each thread that is added to the "wall" thus formed crosses the last in the opposite direction; then, when the height of the "wall" is the width of the piece to be woven, the sticks are drawn from the ground and the whole thing is laid flat. The two centre sticks are now withdrawn and replaced by specially prepared weaving-staffs, polished with sand so as to slip up and down the roof without catching.

To operate the loom, one of the original outside sticks is made fast to some heavy outside object, the other tied to the weaver's waist. He then commences to pass the shuttle (a broad flat stick, on which the warp is wound) to and fro, manipulating the threads of the wool by means of the weaving-staffs, on just the same principle as modern machinery, so that the result is a firmly woven piece of cloth. He commences at the end nearest to him, gradually winding the finished cloth, and working toward the far end. To prevent disaster in the event of

the weaving-staffs slipping out of position, every alternate thread has been fastened securely by a loop to a small square stick which is left attached to the work until it is completed.

Seldom do they dye the cloth when finished, for it is almost always woven in coloured stripes from thread already dyed. On rare occasions, however, a piece is made from natural thread and dipped afterwards, but cloth of one colour is not in vogue.

Needless to say, as soon as this country is opened up to civilization, the advent of traders with cloth which the natives can buy in more than sufficient quantities with the results of one hundredth part of the labour required to weave their own, will cause the aboriginal art to disappear, as has happened in most countries of the world.

Anxious to see how the Antipas supplied themselves with fish, I once went with them (men and women) for a day's sport to a small stream a couple of miles from the settlement. While making our way along the trail, the women cut down *barbasco* wood (the Inca name for a vine whose sap is a deadly poison) and packed it along with them. Arrived at the water's edge, we looked for a suitable pool, exercising great care not to scare the fish away. The party divided into two sections, and each formed a barrier at one end of the pool. The men proceeded to pound the *barbasco* between heavy stones and throw it into the pool, where it floated about without having any apparent effect on the water. Within a minute or two the fish began floating to the surface, upside down, and swam about aimlessly in a dazed condition, easy prey for the savages who waited about (swimming and diving themselves when necessary) collecting them. We caught in half an hour at least a hundred pound weight.

This is the only method of catching fish they know,

except netting. Their nets are made of palm-fibre, and in place of corks and leads they use *balsa* wood (Spanish), and stones. The net is fixed across a rivulet, and the party makes its way by a detour to a point up-stream. There they throw stones into the water and frighten the fish into a hurried flight to where the trap awaits them. The meshes of the nets are so proportioned as to catch the fish by the gills as they rush down-stream.

While speaking of the food supply, I will add a word or two about that deadly weapon, the blow-gun, which is the only means the Jívaros have of procuring meat. These "guns" are about ten feet long, with a bore of about ¼ inch, and an outside diameter of some two inches at the mouthpiece, tapering to ¾ inch at the "muzzle." They have a killing range of two hundred feet at least, within which distance perfect accuracy is assured. Any target from the size of a squirrel upwards can be hit every time by the skillful hunter. Their absolute silence adds to their deadliness a thousandfold, for the hunter can bag a large number of monkeys or turkeys before the troop or flock discovers that death is flying through the air.

The ingenuity that the Jívaros display in the manufacture of these weapons with the primitive implements at their command is worthy of attention, for the finished article could not be turned out any better by a modern factory. What machinery in the world could better overcome the mechanical difficulties of producing a perfectly true ¼ inch bore ten feet in length than do these simple people?

The wood used is the same as that employed for making spears, and it is known in Inca as *chonta*. In grain and colour it resembles ebony, but is much heavier and harder. It belongs to the palm family and bears good fruit. It is remarkable for its absolutely straight

grain and its rigidity (the qualities which make it fit for this particular use). It is so brittle that when broken it splinters into a number of long sharp needles; it is so hard that it is impervious to moisture and unaffected by heat, so that it never warps.

The strips of the shell of the *chonta* are selected, cut to the right length, and smoothed to a thickness of approximately an inch by the removal of the pith, being split to a breadth of an inch and a half. Then by means of the crude tools they have—flints, stones, animals' teeth and shells—a groove is scraped in each piece ¼ inch wide and ⅛ inch deep. It would, as a matter of fact with such primitive tools be materially impossible to cut a crooked groove in this wood, on account of its perfectly straight grain. The two strips are then placed together and bound here and there with bark; then the outer surface is split off bit by bit till it is round in form; next, by making incisions at various points and stripping off portions of the *chonta,* the weapon is tapered so as to comply with the dimensions given above. Now the process of binding commences. The "gun" is tightly wound with green bark tapes (about half an inch in width) from end to end. On this binding is melted black bees' wax (taken from an insect which builds its hive in the ground, and produces a honey which is used for medicinal purposes) which is smoothed over with hot stones and forced into the cracks so as to perfect the surface; next, another layer of bark tapes, slightly thinner, is bound on, and more bees' wax (a heavier coat this time) is applied; the final step in the finishing of the exterior is a second treatment with hot stones, which produces a hard, even surface. Then the completed weapon is a perfectly straight, round, tapered black tube.

Next the bore is trued and polished by means of a cord with a rag tied to its centre and stretched between two

trees. The tube, having been slung on this cord, is run backwards and forwards for weeks, while sand and water are fed into one end; toward the end of this laborious but efficient process, finer sand is used. At the end, the bore has a surface equal to that of the barrel of a shot-gun. Finally, to the butt end of the gun is fitted the mouthpiece, a carefully scraped funnel of hard-wood fashioned to fit the mouth exactly, so as to admit of no air escaping and robbing the weapon of its power. This piece is made to fit over the end of the tube to which it is bound, and waxed by the same process as I have described above. The arrows are always treated with *jambi* (poison—*Inca*). The particular kind which is used, the product of boiling the bark of a vine, has a swift and painless effect on all the animals and birds of the forest, as far as I know, except the jaguar. (I once tried one of the latter, and filled him so full of arrows that he looked like a porcupine, without any apparent effect except that of angering him.) The arrows are made from a bamboo having a triangular cross-section, and of the same size at the joints, which the other canes and bamboos are not. From this species can be cut an absolutely straight missle, which would be impossible in the case of the others, in which each section between the joints is, however slightly, concave. By splitting and scraping, an arrow some twelve inches long and one-sixteenth at its greatest diameter, is made. One end is sharpened to a point one inch long, from the base of which the whole arrow is tapered toward the rear to a point equally fine, in order to give it a perfect balance in flight. The head is dipped in the *jambi* and dried in the sun or before the fire. The base of the head is ringed by means of an instrument which is always carried attached to the quiver (a section of bamboo); this consists of the lower jaw of the *paña* (the barking fish—

Inca) which is fitted with razor-edged teeth. A tuft of cotton is twisted round the shaft about three inches from the tail, which serves the double purpose of the feather of an ordinary arrow and the wad between the powder and shot of a cartridge. Forced out by the air behind the cotton tuft, the missle leaves the "muzzle" so rapidly that it is invisible to anyone looking across its path (though of course visible from behind). The trajectory for the first fifty yards is remarkably flat for the class of weapon, and will penetrate a pine board half an inch at fifteen yards' range. I have hunted with these guns a great deal and can bear witness to their deadly efficiency.

The big monkeys are the hardest game to bring down with shot-gun or rifle. I have shot them to pieces with a Winchester, until their entrails actually fell to the ground, before they have fallen. Even when dead, very frequently they remain suspended by the tail, and the tree has to be climbed before they can be recovered. But the poisoned dart from a blow-gun, as long as the skin is broken at any point, kills them within two minutes. Experiments which I have carried out on domestic animals have proved, moreover, that the poison (of which I brought home a small quantity) acts painlessly, the effect being much the same as an overdose of morphine. This fact leads me to believe that a drug could be manufactured from the same vegetable which would be invaluable in medicine. A trial was once made in the Guianas by an English naturalist with the same drug (under the local Indian name of *huareli*) on a bullock, which died in twenty minutes as a result of three arrow wounds. The vine from which it is made grows in great profusion throughout the Upper Amazon zone, and the process is simple in the extreme. It is cut into sections a foot in length, and the thin hard outer crust of bark is carefully removed by

scraping. The main bark, white when first exposed to the air, turns brown in just the same way as an apple. This inner bark is scraped into fine shavings by means of shells and flints, and these are placed in a colander which rests upon a pot in which water is boiling. The water is poured over the contents of the colander repeatedly, until the constant action on it has drawn out the alkaloid, when the lifeless shavings are thrown away and the residue is boiled down until it resembles, both in consistency, colour, and smell, plain chocolate. While still warm, it is poured into the bamboo receptacle previously described and when cool, it becomes semi-solidified.

Of course there is a great deal of superstition among the Jívaros in connection with the manufacture of this poison. The medicine man alone can make the pots which are used to boil it, and he is furthermore the only person who is privileged to make the poison itself. He collects the stings from various species of noxious insects. Spiders' teeth are also greatly favoured; both these ingredients are introduced into the pot with due ceremony and unlimited confidence in their deadliness. If water can be obtained from the spot where a rainbow touches the earth, then indeed the brew will be immeasurably potent! But be that as it may, the poison which we bartered to the Antipas had not been tempered with any strange charm, as we who made it know, and yet it is declared by them to be the best they had ever used.

There is really a certain amount of risk and danger connected with its manufacture, insomuch as the fumes given off by the boiling liquid are pungent and noxious. I believe that they would prove fatal if inhaled in sufficient quantities; which supposition lends credence to the stories of the Indians that many a medicine man has been found dead over the pot.

Despite its proved deadliness, this poison is never used by the head-hunters in warfare. (I say "deadliness" with some justification, for it compares very favorably with, say, the poisonous snakes of India, whose bites take more hours to bring on death than the *jambi* does minutes.) Why, I cannot explain, unless it be that a man can snatch an arrow from a wound so quickly that the poison would never have time to be absorbed by his system, as it clings to the arrow-head in a gelatinous form. While speaking of this poison and its effect on men, I recall an incident that happened on the Yasuní when Jack Rouse and I were existing through those ghastly eighteen months. An open wound that had become fly-blown and full of worms (there was nothing in the nature of a *fresh* cut about it) had to be cured somehow, and every remedy we could think of had failed. The case was one of desperate urgency, and Jack declared that "he would rather be poisoned than eaten alive by worms." So it was decided that I should fill the wound with this same *jambi,* and I applied about a thimbleful, or enough to kill an ox. Neither Jack nor the worms took the slightest notice. Now it may be that his life was saved by the fact that there was no fresh blood flowing, or again that the poison, for some strange reason, has no effect on men, which latter supposition would account for its never being used in battle. I may add that the worms were summarily ejected in the space of half a minute by the application of a wad of cotton soaked in nicotine procured by condensing cigarette smoke on the finger-nails. (The juice of the same cigarettes when boiled has no value whatever).

It is a self-evident fact that the fish and meat on which the Antipas live so largely is nearly all poisoned, for we have noted already that the blow-gun is the only weapon of the chase, and that they kill their fish more often than

not with the *barbasco*. Curiously enough, as is often the case with poisons, not only is the flesh of the fish, which has *not* been hypodermically infected, good to eat, but even that of the animal which has. Finally, it is this same *barbasco* juice which the Jívaro women drink to commit suicide.

The religion of the Antipas, as far as I was able to discover, is simple and primitive. They fear two gods; the god of rivers and rain, and the god of the forest, the former called by the Incas *Yacu mámam* (the Odd-footed One), the latter *Chulla Chaquicuna* (the Great One of the Waters).

The true Inca religion is of course sun-worship, but those descendants of the old kingdom who still retain the mother-tongue, but who have strayed from the mountains into the woods of the Amazon basin have, in the course of generations, adapted themselves to their new environments, and dropped the worship of the god they scarcely see, adopting those of the Jívaros in their stead to whom they must look for prosperity. The rivers, the rain and the forest give them all they possess, while the sun plays but a small part in their lives. To the worship of the two Jívaro gods they have added a lively appreciation of the existence of the Evil One, in the person of *Supai,* at whose door they lay every misfortune that overtakes them.

I have digressed for a moment on the subject of the religion of the Incas rather in order to compare it with that of their neighbours, the Jívaros, of whom we are speaking, than to examine it in detail. To return, then, to the latter; *Chulla-Chaquicuna* is Lord of the Forest, and moves through it unseen by any, in the form of a man with one human and one jaguar's foot. The Indians point out his tracks, as indeed they have done to me many a time. The obvious explanation of their ex-

istence (for they do indeed exist!) seems never to have occurred to their simple minds. When he has been found to have passed their way they attribute anything out of the ordinary (abundance or scarcity of game, an unsuccessful brew of poison, or the presence of dangerous snakes, for example) to his influence.

Yacu-mámam possesses the power of changing from a tapir to an anaconda, from an anaconda to a frog. His haunts are the rivers and streams, and he brings on destructive floods or beneficial showers as he wills. Thus these three animals are never molested by the Jívaros, for fear of the anger of *Yacu-mámam*. This fact accounts for the tameness of the tapir throughout the region of which we speak.

As far as I know no sacrifices are ever offered to these gods. They are regarded from a respectful distance, rather than cultivated with complicated ceremony. Images and religious festivals are unknown to the Jívaro. His is the religion of a simple, practical forest-folk, based on superstition, which is, after all, common to all primitive peoples.

Canoe-making is an art which must have been passed down among the Jívaros for many centuries, and with little or no advancement in method, for to-day the process is so primitive as to be almost certainly the same as that employed by the original inventors. With infinite patience, a large semi-hard-wood tree three to four feet in diameter is cut down. (I give it no name, as several varieties may be used.) A clearing is made in the vicinity of the fallen trunk to allow the work to be done. The top of the tree is then burned off, until a rough log some twenty to thirty feet long in the case of the biggest canoes, is left. Then, over a period of several months, the arduous task of removing the bark and sap, and of fashioning the log, inside and out, to the shape

of a dugout is carried out. With fire and stone axe, little by little the tough wood is charred and chipped. Over and over again the same process is repeated; the women stand fanning the flames, the men work on the blackened surface with their slow tools. Not more than a couple of inches can be burnt at a time, when the charcoal must be scraped away, and a fresh fire built. And so the log gradually takes on the shape of a canoe, and the first rough process draws to a close. As the last of the fires are doing their work, wedges are driven in between the sides of the craft to give them the outward slant which is noticeable in the finished dugout. The fire also serves to drive out any insects which may have made their way into the wood. Then comes the still longer process of scraping and polishing with stones and sand, until the surface of the canoe, inside and outside, is free from imperfections.

When we arrived in the country, we had with us many cases of machetes and steel axes, which we bartered from time to time. It may be, then, that the next time I visit them, to get them to work the "placer" deposits of gold which lie hidden somewhere in their territory, I shall find that a great change has been wrought in their lives by the advent of these tools. For of all the blessings of civilization which these people needed, the axe and the machete to combat the prolific growth of weeds and bush in their clearings, and to make for themselves the multitudinous necessities of life—for almost everything they use is cut from *numi* (wood—*Jivaro*)—stand out first and foremost.

During our sojourn among the Antipas in their homes, I had many an opportunity of studying their everyday lives. You walk into a hut and a typically domestic scene presents itself. The women are seated on their heels about a great earthernware jar of freshly boiled

mama (arrowroot—*Jivaro*). Some are half-clothed, some not clothed at all. Those who have lost their husbands in war must pick up what cloth they can, the cast-offs of their luckier neighbours whose menfolk still live to weave for them. A monkey or two is pottering about, chewing bananas, and even a tame *paujil* is perched on a cross-beam, uttering its peculiar call. A woman stretches out her hand and selects a piece of *yuca* from the pot. She puts it in her mouth and chews it to a pulp resembling mashed potatoes; satisfied that it has reached the desired state, she deposits it on the ever-growing pile of the same pulp, which stands within reach of all on banana leaves. This is the *giamanchi, the staff of life.* (Preserved with the human saliva, it will last for six months if stored in crocks and buried in the ground against contact with light or air. When the time comes for it to be consumed, or in other words, when the proper amount of fermentation has taken place, it is mixed with water in a gourd until it looks and tastes like buttermilk. The whole idea is to our modern minds repulsive, but my own experiments have proved that there is no other way (in the woods) of preserving arrowroot. It is a highly sustaining starchy tuber, containing 80 per cent. starch as against the potato's 20 per cent. Cooked when fresh, it is light and fluffy—a delicious vegetable dish.

One or two of the women are carrying babies slung in a small cloth hammock on the back. One of them is nursing a baby which cannot be less than three years old. (This is a common custom, which appears to us both strange and undesirable. The Antipa women do not wean their infants until they are grown to the *kindergarten* stage as we know it. They even pack them long after they can walk, run and swim. Thus the step from babyhood to marriage is only a matter of seven or eight years.

Another woman is nursing her baby when she remembers the young monkey curled up on her head. It too she treats as her own offspring, and suckles it with the same care as she does her son. (This is common among the Indians of the Amazon, be they semi-civilized or savage.)

Six or eight fires are smouldering round the walls, one for each wife. On a meat-rack steaks from a freshly killed *huangana* (wild hog—*Inca*) are being cured, and their smell fills the house.

Leaving the women to their daily task of chewing, after having accepted the *giamanchi* proffered by one, we pass outside to where a group of bucks are engaged in wild conversation. They are, to all appearances, imitating the action of a trombone player. Their right hands fly to and fro from their mouths to the full extent of their arms, palms inwards. Their tones are loud and deep, and the light in their dark eyes betrays their emotion. They are talking of war; this we know, for only then do they indulge in these gestures and forced tones.

Nearby in the forest rises the smoke of many fires, and the thudding of the axes is heard as the party works on a new dugout. Over there comes a string of women, heavily laden with *yuca,* bananas, and faggots cut from the *chacra.* Entering another house, we find a man at work on a blow-gun, with a pot of boiling beeswax at his elbow, his hair wound round his neck to keep it from the fire. A boy of some ten years is eagerly helping his father to complete the weapon which is to be his. Soon he will be off into the woods after humming-birds, which will give him plenty of chances to perfect his aim before his lungs are strong enough to allow him to take his place among the hunters of his tribe, with real poisoned arrows. Grouped at the door under the shade

of a *pántam* (banana plant—*Jívaro*) are half a dozen women making baskets. They manipulate the split rattans with ease and dexterity, weaving intricate patterns, and producing baskets of great strength. They are made in pairs, one set slightly smaller than the other; the larger is then lined with a specially tough palm-leaf and the smaller is placed inside it. The two are then sewn together round the top, and a cover, composed of another pair of baskets is hinged to the first. The result is a durable, rainproof receptacle, which is used for packing anything and everything, or for storing household goods; those which are destined for packing only are made three feet high and two feet broad. I learned the art of making them myself on the Yasuní, and the knowledge stood me in good stead.

All the men and women we meet are strong and healthy, for although once in the hands of the medicine man they have but a poor chance of recovery (he generally starves his patients to death), they have little need of his services, being absolutely free from diseases, except smallpox and one other of which the chief symptom is a cough, but which I was never able to identify.

I am reminded of an incident which took place when I was with the Antipas. One morning, there was brought to me a warrior who had been wounded by a Huambiza with a shot-gun loaded with powder and pebbles and fired at short range (surely part of the booty of the Barranca raid). The bone in the upper arm was shattered, the limb dangling useless. The man was so emaciated that he could hardly stand, and the wound was septic. I syringed him with bi-chloride of mercury and dressed his wound for him. On enquiring as to the diet on which he had been put by the medicine man, I found that he was forbidden to eat anything but green bananas!

However, persuaded by the rapid progress that he made under my care, the local oracle gave in, and the man was permitted to take proper nourishment. He recovered completely as I found on my return from the Santiago.

Contentment reigns supreme. Men and women seem happy in their lot. They have an abundance of every necessity and luxury they know. Their one worry in life is the constant fear of attack by raiders, but this they forget as easily as children do the dangers of the street. Light is the daily round of all, and above all others of him who has a daughter to give in marriage! He who aspires to her hand becomes to all intents and purposes the slave of his future father-in-law for a term of five or six months until he proves his worth. The young savage takes over the scouting, hunting and fishing duties of the house into which he is going to marry; he is at the beck and call of its head, and must answer every call like a fag at school. But only once does he go through the mill; his own household set up, he takes to himself as many wives as he can find among his own people or steal from his enemies; thus it comes about that there is many a woman among the four Jívaro tribes who has been stolen and re-stolen until she is as much at home on the Santiago as on the Marañon, as happy burning hair off monkeys for an Aguaruna as spinning cotton for a Pautecuma. Indeed to my mind there can be one explanation of the existence of identical languages, habits, clothes, modes of fishing and hunting, and applied arts among all the Jívaro peoples, namely that they spring from a common ancestral tribe. A family would break away from the common hunting grounds, move off and establish itself on another river, and nurse its hatred of the parent group until, joined by others, little by little it became the nucleus of another tribe. And so through the course of

time they have drifted so far apart that to-day no one tribe is found with their headquarters within thirty days' canoeing of another, and a deadly hostility exists between them all. There are white men alive to-day in the States who have been scalped by North American Indians; but after the Jívaro has taken his war-trophy, *"finita la commedia."*

CHAPTER XVIII

TURNING THE CORNER

Pitacunca leads the way—The crew—A monkey-hunt—A legend—forest delicacies—Another concert—Fruit-pulp—Wild hogs—Ambusha tries our patience—Shipwreck.

PITACUNCA in his own canoe, led the way with giant strokes. Seated in the stern, the captain's post, his long hair trailing in the wash, he surveyed the course with a vigilance that neither sound nor movement could escape. Each minute further from home, he saw in every stir on the bank a Huambiza. A massive figure, he looked the very embodiment of strength and deviltry. I doubt not, however, that had a Huambiza appeared among the undergrowth, he would have turned a double handspring into the river. Indeed, had enemies appeared on the scene at that moment, it would have been a case of mutual dismay and we, the white men of the party, should have been hard put to it to prevent friend and foe disappearing over opposite horizons. The sight of *apaches* travelling in peace with their arch-enemies would have been enough for the Huambizas; and as for our escort, I cannot honestly say that our skill with the rifle would have been enough to counteract their inclination to stampede. In common with their mythical cousins of the North American continent "the noble red men of the forest," the Jívaros are credited by those who have never come into personal contact with them, with many a virtue of which they are entirely innocent. Contrary to what is generally supposed, these untamed sons of the forest are a compendium of all that is cunning, knavish, and diabolical; they have the courage of wild animals in battle,

but unlike the latter, their guiding principle is "every man for himself." The truth is not in them. Their attempts at understanding the psychology of the white man are even more puerile than were those of the Germans in the Great War. A totally unenlightened race, they must be controlled by fear and superstition.

A flash of lightning and a clap of thunder from where the Santiago lay to the north was the signal for a trombone concert (*fortissimo furioso*). Pitacunca declared that the Huambiza medicine man was at work. That was too much for his followers. They dropped their paddles and their arms flew back and forth as they fell to talking of war, in dire distress at the potency of the hostile magic. Pitacunca booming with his great bass voice led the chorus.

Not once nor twice were we treated to this unique form of expression in the course of our trip down to Borja. Every little while it would break out with redoubled energy as we drew nearer the mouth of the Santiago, but we comforted ourselves with the thought of the Huambizas themselves shivering behind their palisades at the thought of the spells which Pitacunca was working.

A few hours' paddling brought us to the western mouth of the Pongo Menseriche. Suddenly the keen eyes of our following spotted the swaying of branches on the right bank. Pitacunca had brought with him Ungucha, an agile youth who climbed the *bejuco* like the monkeys themselves; Najáncos, whom I had floored for stealing a *carisa* of poison, and later propitiated by presenting him with the coveted object, and a drink of rum besides (an action greatly approved by the chief, Lázaro); Itsampi, Anguache, Chijatso, men of skill and brawn; Noagra, the baby of the party, and lastly, Quiájui, named "darkness," for his wonderful power of concealing himself in the woods.

"Monkeys" was whispered round the crews. We were glad, for our stock of fresh food was precious; the more we could bring into camp at Borja, the better, for the sight of plantains, bananas, *yuca*, yams, peanuts, sweet potatoes and honey would be welcome to our companions, who had not tasted of these luxuries since we left Barranca.

The *anungatas* (steersmen—*Jivaro*) made for the shore. We landed, all of us except Game and Noagra, who stood guard over the canoes. Game was a little chary of venturing barefoot into the woods, after what he had gone through on our passage up-stream. Then started an exhibition of rifle versus blow-gun, in which the latter came out with flying colours. The type of monkey which we were after, the *coto* (the howling monkey—*Inca*), weighs about thirty pounds, and is like the ostrich, in that it hides its eyes in the conviction that it is itself concealed from its enemies. Hanging by its hands, feet and tail from the underside of one of the big limbs, it remains immobile, and even the crack of a rifle does not scare it into flight. This animal is the evening and morning "songster" of the Amazon woods. At sunrise and sunset, each troupe parades in single file about the branches of the tree which is their temporary home, uttering a deep growling call which can be heard for miles. The first time I heard it, a monkey was the last thing which occurred to me; it seemed that all the *tigres* on the Amazon were engaged in a death-struggle. Breaking through the silence of dawn, the loneliest hour of the twenty-four, it drowns the squawk of the waking parrots, and sets the woods reverberating. The *coto* has ten fingers and as many toes, and its tail, two and a half inches in diameter at the thickest part, is tremendously powerful. When shot, he first lets go his hand-grip, and then his feet loosen

their hold; last of all his tail slips gradually from the branch to which it is tied, and down he crashes. Sometimes he dies where he hangs, his tail coiled about the limb in a grip which tightens more and more as his body grows cold. That was when Ungucha had a chance of showing his skill as a climber. Up the strands of *bejuco* he went, hand over hand, a hundred feet and more, until he was among the topmost limbs of a big tree where he swung from branch to branch until he reached his prey, which came crashing to earth a moment later.

It is these same monkeys with which the Cocama Indians play practical jokes on each other, throwing one which has been brought down with a shotgun into a canoe where the crew is resting, for the fun of seeing them all tumble out into the water helter-skelter in fear of the powerful jaws of the dying brute. They do well to run away from this beast, which has been equipped by Nature with a lower jaw almost equal in size to the rest of the head, and whose bite is stronger than that of a *tigre*. I once wounded one on the Napo and he attacked me. Pointing my gun at him, I tried to keep him off, but he seized the gun itself, and closed the muzzle with his teeth.

The Jívaros tell how it came about that the *coto* has an enormously oversized larynx. One day the *maquisapa* and he met each other in the woods. The *coto* was showing the other how to break cocoanuts by pounding them together, but his long-legged cousin, when he tried to imitate him, caught his thumbs between the nuts and lopped them off. Determined to revenge their loss, when next he met his bearded friend, he persuaded him by means of slight-of-hand that it was unnecessary to crack them at all, and that they tasted much better when swallowed whole. The credulous *coto* followed his

advice, but the cocoanut stuck in his throat, and left its mark on all his progeny to this day, while the children of the *maquisapa* must go for all time without their thumbs, although they still retain their ten toes.

That afternoon we dropped some two dozen *cotos,* only three of which fell to my rifle. The condition of these three caused the Jívaros furiously to think, for they were shot to pieces, and were indeed an ugly mess. We packed them back to the bank, tied by their tails in bunches of four, and carried slung over the head. The game was dipped in the river to moisten their hair. A brushwood fire was built to singe them as they hung by their tails from a pole, which stretched the whole length of the blaze. As the muscles contracted with the heat, a gruesome spectacle presented itself, for their limbs moved, they clenched their hands, and their faces were distorted with an ugly grin which exposed their regular teeth. When singed all over, they were taken from the fire and scraped with machetes. There is only one word to describe the portions of meat which were hacked off—hunks. Regardless of joints or bones, they were chopped up by the savages, who had never known any better instrument than the stone-axe; the pieces were thrown into the boiling-pots, still half-covered with burnt hair which the hasty scraping had missed. For twenty minutes they cooked, emitting an unspeakable odour which was as welcome to the Antipas as that of breakfast bacon to the hungry white hunter.

I have omitted to mention what is always the tid-bit of such feasts. Before the singeing and cooking of the animals begin, they must of course be cleaned. (When meat is scarce, nothing is thrown away but the bones; even the guts are scraped and toasted.) The contents of the stomach are extracted and mixed like *giamanchi,* with water. Then without any further ado

they are drunk. At first the very idea is repulsive, but after all, the monkey lives on fresh wild fruits and his inside is a clean as ours. He has merely started the process of peptonization and digestion for us, which saves us trouble. I was expecting, when first I tasted this delicacy, to find a trace of bitter gastric juices, but was pleasantly surprised; only the pure flavour of the fruit-pulp was there, and it made an excellent drink.

The Jívaros, as I have said, throw nothing away but the bones, and even these they break with their teeth to get at the marrow. Although I have found many of their dishes excellent eating, I must say that soup cooked without salt, more especially when it is strongly flavoured with burnt hair, is not palatable. Indeed, in order to allay our hunger Game and I selected a young *coto* from the bag, skinned it and roasted it on the embers. Prepared in this way, they are just as good eating as any other game I have tasted except their cousin the *maquisapa,* whose equal, in my estimation, cannot be found on any table.

Although we were so near camp, "Pete" (*alias* Pitacunca) advised us not to try the passage of the Pongo that same evening, but to lash the canoes together next morning, and run the minimum of risk. So after dark we moved half a mile up-stream, to hoodwink anybody who might have been watching our movements, and pitched our camp on a sand-spit. All night long we two whites kept watch, relieving each other every two hours or so. It was not that we feared attack of the Huambizas or anyone else, but on account of the risk of losing our allies, who were liable to disappear if the fancy took them. But they slept soundly and we watched well, while to the east the roar of the Pongo rose on the night air.

The next morning we were under way at the first

break of dawn, both Game and myself being eager to join up with the party at Borja as soon as possible. Luck favoured us, for the river was at the right stage for the passage of the cañon. With the canoes strapped together, a log between them, and one on either side, we steered our unsinkable raft through the pools and rapids without shipping much water. When we came to the great whirlpool we steered round the southern edge, and easily ran clear of the drag on the far side. Indeed I never saw the pool in such a quiet state as it was that morning, for although it caused a flutter of excitement (as it never would fail to do) its passage was child's play compared to the other occasions on which I navigated it.

As we swept clear of the eastern mouth of the gorge, we came in full view of the camp, and were greeted with cheers from our companions, who were preparing to start in search of us. The previous day had been the time-limit set for our return, and while we had been contentedly chewing monkey six short miles away, they had anxiously discussed our fate at the hands of the head-hunters or the river. They were quite as pleased to see the luscious plantains hanging over the bows of the dug-outs as they were to hail us, and we in our turn, I may add, appreciated the hot coffee and milk which they had to offer us, as much as anything else.

Pitacunca, having landed, shot one glance at the camp and its inhabitants, and turned on his heel. Followed by the rest of the savages, he walked to a spot some twenty yards away, sat down with his back to all of us, and set up a dismal wailing chant in a minor key. His every action was imitated by the others, who joined in the chorus, and sent that dirge floating across the Marañon. Never a word had any of them spoken since they had caught sight of our outfit. They seemed to be stunned

by the sight of so many *apaches* (white people) and so much kit, as if the folly of having entrusted themselves to these unknown white creatures was suddenly brought home to them. No other reason occurs to me for so much yowling. It seemed as if they would never stop and we did not care to interrupt them, until finally Jack, whose first introduction to the Antipas cannot be said to have been inducive to a happy understanding, enquired in plain English whether they didn't see their way to changing the tune. The tune never *was* changed, but at the end of half an hour or so it died a natural death.

Little by little the Jívaros drifted over and seated themselves by the camp fire. Finally Jack and Ed. roused them from the trance into which they had fallen, the former doing a double-shuffle in the bottom of the *Exploradora* to the accompaniment of the latter's banjo. The savages were greatly impressed, both by the unrivalled quality of the music and the dancer's skill! To complete their recovery, we presented them with the most glaring specimens of the shirts we carried for barter—they were striped indiscriminately with orange, black, red, yellow and green, and were known among us as "Hallelujahs."

We settled down together to wait for the Santiago, which was swelling the waters of the Pongo to a dangerous height, to fall, so that the loaded canoes could pass through. Two or three times we visited the cañon during the next few days, but each time we returned to camp convinced of the impracticability of attempting the passage as yet. The Pongo Menseriche is not to be played with.

We took advantage of the periods of rest to give the Indians demonstrations of the supernatural power of the rifles we white men (*apaches*) carried with us. A little healthy fear of us would do no harm. So we took them off out of camp and showed them how we

could bring down small game two and three hundred yards away. We were careful to explain, too, that what we were doing was nothing to what we could and would do in case of necessity. For example, if the Huambizas really aroused our anger, even though they might be half a dozen miles up-stream and round three bends, we should send our bullets off to chase them and put them to sleep. When a turkey-buzzard was brought down by Jack off a rock where it was perched, so far away that it looked almost a tiny speck against the sky, our friends really began to sit up and take notice. By the end of the week we had established an undoubted moral supremacy, which proved shortly afterwards, and on many a subsequent occasion when we had to handle large parties of these untrustworthy rascals, to be our mainstay.

One day, driven mad by the screaming of the macaws which had come to feed in the palms near camp, I suggested to the medicine man that we should go out and bag a few. The expedition was successful and we brought a few back. I noticed that the first thing the Jívaros did was to extract the contents of the crop, pure fruit-pulp, and eat it, giving it the first place among the delicacies which the bird had to offer. I cannot lay too much stress on the excellence of this dainty morsel. The palm-fruits on which they live are exceedingly hard, and contain a number of seeds or kernels embedded in the meat, making it more trouble than it is worth, despite the attractiveness of the meat itself, to eat the fruit. But all the spade-work is done by the parrot, whose sharp beak and dry tongue separate and reject the seeds, with no deleterious effect on the fruit itself. Once more we have an example of the possibility of taking advantage of the digestive efforts of a wild creature and finishing the feast.

Finding plenty of hog-tracks in the vicinity, we de-

cided to hunt them down and cure their meat against the day when we should be setting off up-stream once more. The meat of these hogs or *peccariesi* seems to preserve its flavour, despite the daily smoking to which it must be subjected to protect it from insects, better than any other meat to be found in the forest. Of this game there are two species, the *huangana* and the *sajina* (both *Inca*); the former is more the shape of a domestic pig than anything else, is black, and weighs about a hundred pounds; it carries a musk-sack on the middle of the back, the use of which is somewhat obscure to me; perhaps it may be a form of protection against insects; anyway, a man can track them through the woods by scent as easily as a hound follows a hare, so powerful is the smell they leave behind them on every object against which they rub. It is armed with a pair of fine tusks set in the lower jaw, which it uses both to dig up roots, and to rip the entrails out of its antagonists, the jaguars. The latter are afraid of them, but occasionally follow a herd in the hopes of being able to grab a young hog and make off with it. Not always do they succeed, and when caught their fate is sealed. They are torn to pieces by the infuriated beasts and devoured, head, tail, skin and feet. The *huangana* will eat snakes, lizards, and anything else that he can find. The herd can be smelt a full mile away if the wind is set right, and long before one is found it will be heard rooting and snuffling in the ground, cracking nuts, one animal fighting another for the tid-bits which the monkeys have dropped. The herd often numbers two hundred or more and will attack on sight. To approach these beasts is easy, for they are too busily occupied in searching for food; their sight and scent are not highly developed, no doubt because they have never had to fear anything that walks in the woods. If you are stalking these animals you will be wise to select

your tree before you cover the last fifty yards (and see that the tree contains no ants' nor hornets' nests!) When the nearest *huangana* sees you, he will utter his war-cry—an ominous rattling of his tusks—which is taken up by the whole herd. A noise is produced which is at the same time fearful and wonderful. It is like a thousand pairs of castanets. It echoes and re-echoes round the woods until it seems to come from every tree. With what terrific speed the lower jaws of this animal must vibrate to give out such a volume of sound may well be imagined.

Select your tree, then, and stand ready to jump as soon as you have fired your shots. The herd will start milling round looking for something to charge, until it sees your smoke, or a movement of your body. Then jump! And may the branch bear your weight, or you will shoot no more *huanganas!*

The herd, usually sweeps on under the tree and leaves the hunter to descend in peace, pick up the kill, and make his way back to camp. In any event you will be left in peace, if you are not located by sight or scent, for the hogs will go tearing off in one great avalanche, charging some imaginary enemy, and will not pull up until they have covered four or five miles and feel like settling down to continue their feed.

I have spoken already of the size of the herds of *huanganas* which patrol the Amazon forests. To lend credence to my estimate I must mention that once on the Napo I watched a herd swimming the river at a point where it was a good three hundred yards broad, and while they were still streaming down one bank the vanguard was climbing the other. Moreover, let it not be imagined that they were in Indian file—they came swarming across in a great black mass.

The second species, the *sajina* or collared peccary, is

somewhat smaller and, though fierce enough when disturbed, is not so formidable as its cousin. Briefly it can be described as closely resembling the wild boar of Europe —thinnish wiry hindquarters, heavy shoulders, and short thickset forelegs, a lean flat barrel, bushy hair on shoulders and neck, long fierce tusks, and patches of white to relieve the dead black all over the body. It hunts in pairs, or very small groups of a few pairs.

I once had occasion to prove the temper of the *sajina*. Having strayed from camp a little way without my rifle (a risky thing to do, I must admit) I came across a couple rooting for food in the bush. They came out into the open to within twenty yards of where I was working with an axe, regardless of the noise and flying chips.

They would perhaps have left me alone, had I not thrown a stick to frighten them off. The challenge was accepted, however, and one of the beasts came on with such an ugly snort that I turned monkey at once and took to the upper branches. After one look into those wicked little eyes, I felt that a well-covered retirement was distinctly indicated. An axe has its uses. It is all very well for chopping trees, for if you miss your swing, the tree won't bite your leg off. For carving pork on the hoof I prefer an instrument with a longer reach.

At the end of a week of resting and hunting in camp at Borja, we began to realise that the Jívaros' interest in the novelty of camp-life among their new *apache* friends was giving place to restlessness. I think they were not quite sure that one fine day, without any apology, we shouldn't pack them off down-stream into slavery. So we held a council of war and decided to risk the Pongo in its swollen state; let us see what we thought about it at the time:

"Sept. 27th, 1899. The water has certainly not fallen

to the desired level, but there seems to be more rain hanging about, and we prefer to risk shipwreck rather than the desertion of our valuable allies. They themselves are only too anxious to beat up through the cañon for it leads to home. Their temper is more uncertain every day, and Pitacunca casts longing glances in the direction of the distant foothills. So we have decided to push off in the morning with all our kit and try to make the Santiago."

So next morning, September 28th, we started. Game and I led the way in the new canoe, in which were packed the cooking utensils, a set of copper pots and kettles which we had had made specially for the expedition in Iquitos. We had left the small hunting dugout behind, as being useless for heavy work. It only held two men, without any equipment. The remainder of the party followed in the other three dugouts, the two races being mixed in such a way that the Indians could give no trouble. "Pete" captained the *Exploradora,* which held the bulk of our stores. To Morse and Iberico were assigned the commands of the remaining two craft. 'Ambusha was put in a place where he could do no harm, between Jack and Pedro the Peruvian. By this time we were convinced that if he could have conspired with the Indians to steal a canoe and throw in his lot with them, he would have done so. Jack and Morse gave him no peace. He was the constant butt of all the fun of the camp. Never did a *paujil* turn out badly from the pot but Jack would bemoan the fact that 'Ambusha hadn't cooked it. Once when he served the dinner he was complimented on the fine quality of the salt which, he was assured, was the finest yet served on the trip. And so on, until he got so mad that murder showed in his eye. The climax came when one night, when he was not supposed to be on guard, I found him

prowling with his rifle in the vicinity of Morse's mosquito-bar. He had some specious reason to account for himself but we were not deceived.

All went well until we in the leading dugout came to one of the projecting points of rock in the Pongo, round which we had to feel our way to make the next eddy. Poor old Game was never much of a canoeman. On this occasion he turned the bow in toward the wall before the poop had turned the corner, and the force of the current dashed us against the rock and tipped us out, cooking kit and all. We could hang on to the ledges of rock on the lee side, but the pots and pans were seen no more. Doubtless they are at this moment resting from their arduous duties, in some rocky chasm, filled with gold. That gigantic natural sluice-way must be yellow with the precious metal washed from the upper waters, where the ancient Incas drew their fabulous wealth.

With little difficulty we righted the canoe under the protection of the rocky point, and once more made our way up-stream. Knowing the trick of the great whirlpool, we turned to our own advantage that mighty cauldron, which must prove the Waterloo of those who approach it unwarily. Although, as I have said, the water was not in an ideal state we all came through without mishap. We discovered that day that we had found the same solution to the problem of passing the pool as the Jívaros practiced themselves.

We did not halt on the Pongo *playa* that day, but pushed on clear of the western gate, after waging eight hours' war against the seething waters of that dark abyss.

CHAPTER XIX

THE SANTIAGO

The Promised Land—Adventurous merchants—An unwritten contract—Pedro mounts guard—A sick prophet—The Jívaro medicine-man—We open some boxes—Two more turn back—Gold—An interruption.

On the sand-spit at the junction of the Santiago and the Marañon lay some two hundred Antipa canoes, heavily laden with fruit, vegetables, honey and *giamanchi* in enormous quantities. They were drawn up in a great uneven fringe for a distance of a full quarter of a mile all around the edge of the tongue which juts out between the two rivers, and scattered all over the miniature peninsular were hundreds of savages, men, women and children—three or four to every canoe—squatting in groups of families, some gossiping, some cooking, others speaking excitedly of war, others polishing their spears with sand, and yet others already partaking of their evening meal. The slanting rays of the sun tinted the whole scene with a purplish light, and threw into restful harmony the naturally crude colouring of forest, river, sand and savage. No cloud obscured the deep blue dome of the evening sky. The three long wailing notes of the *yungaruru* floated across the water, and the screams of the first flock of parrots rose high above the hum of human chatter as they skimmed over the trees on their return home from the day's foraging.

As we toiled up the stretch of bad water that lies between the gate of the cañon and the junction of the rivers, the scene gradually unfolded itself before our astonished eyes. What a change was this from the deadly

emptiness of the landscape when Game and I first paddled by the long desolate first reach of the Santiago, straining our eyes for the sight of any living thing!

To say we were taken by surprise is to understate the case. We were amazed at the rapidity with which the fame of our expedition had spread amongst the savages. Apparently a good proportion of the whole tribe of Antipas had ventured well outside the radius of their home territory—a rare display of boldness—in search of those confounded presents of ours. There they were, sitting patiently waiting for hand-mirrors and striped shirts, with tons of fruit, vegetables, and other products of the rivers and woods. The full capacity of our fleet of four canoes was five tons at the most, and we were already heavily laden. Despite this, we found it wholly impossible to convince these adventurous merchants of the impracticability of their suggestion that we should take possession of all they had to offer in exchange for the coveted trade-goods. That evening we spent weary hours in trying to drive this obvious truth home to them, without any success attending our efforts. We transacted what business we must, and when we had bought more peanuts and honey than we could possibly want, we decided to sleep on the matter.

Next morning we were forced with the necessity of getting rid of that great concourse of Jívaros and, more important, seeing them go off in a contented frame of mind. We decided eventually to go the round of the whole beach, and present the crew of each canoe—generally a man with a couple of women and a child or two—with something to keep them quiet. I may mention that we had made the whole party leave the tip of the tongue of sand to us, where we pitched our little linen tent in a strategic position; on three sides water, which nothing could cross alive unless we wished it so,

and on the fourth the flat open sand-bar with no protection whatever for lurking bodies.

The plan which we adopted was successful up to a point; the savages were certainly well satisfied to receive their presents, and to obtain a close view of the far-famed *apaches,* whose arrival had caused such a stir in the country; but all the good which had been done was threatened with instant reverse by our refusal to "trade in" their tons of supplies for which we had no use nor space for carrying along in our four dugouts; so acceptance was the only possible course to follow. The beach became littered with the finest produce of the country.

Then came the stiffer problem, the ultimate object of all our manoeuvering up to this time; viz., to organize a fleet of canoes and canoemen not only to move our cargo and outfit up the Santiago but to accompany us as a guard against attack and as a war party in any possible conflict with the Huambizas. These Antipas were bitter enemies of the Huambizas and therefore we figured they would admirably suit our purpose. For many days we had been working up to this climax, endeavouring to convince old Pitacunca that it would be worth his while to give us thirty days' paddling in exchange for his choice of an axe or machete, with the same terms for every one of his men. No other bait had been tempting enough, as we had known only too well would be the case. Bit by bit we had led them on, until at last we had made our final offer, and before their bulging eyes we opened a box of axes and a case of machetes. The sight of the glistening steel and the bright red paint on the handles struck home to their very souls (if they had any), and I could see that they decided then and there to possess themselves of these treasures by fair means or foul. They knew, and we knew, that they had no

intention whatever of fulfilling their contract, despite the solemnity with which the terms were propounded and agreed to. Jack remarked at the time, I remember, that it was a moot point as to which party thought the other bigger fools. But we had our own ideas as to the enforcing of the contract. There was no doubt about it that if we wished to retain the services of the Indians we should have to be eternally vigilant and diplomatic. By day they could never give us the slip, clearly, armed as we were with Winchesters. The canoemen would be divided between the several craft and escape would be out of the question. By night we should chain the canoes together, and always keep a guard mounted. By land they would never dare to face the risks of encountering a Huambiza war party. And so it turned out, with the exception that we allowed Pitacunca to take the *Exploradora* with three other Antipas, keeping them always within rifle-shot; in any event, they would not cut and run without their comrades and even if they did they could never paddle so heavy a craft away from us who manned the light twenty-four footers. In short, they were a slippery crew to deal with, and we couldn't be too careful.

Meanwhile, the bulk of the gathering of Antipas had melted away, leaving only the wise minority, who saw something in the shape of a big haul coming when we turned the bows of our dugouts up the Santiago. Clearly we should leave behind us nine-tenths of our purchases, and the harvest would be rich for those who were there to gather it. (Old "Pete" had probably warned them to be ready at midnight on our first night out.) Perhaps the bulk of the remainder watched us from the seclusion of the woods as we pushed off, as they hoped, in all innocence.

"Sept. 29th. Having finally satisfied the Antipas, by

means of our presents, that we are friendly disposed toward them, and closed the deal with the crew by handing them out their axes, we are due to start at mid-day to-day. 'Pete' and his men are obviously well satisfied with the business they have done. It is quite clear that they contemplate leaving us to-night with much relish."

About five o'clock that evening we sighted a sand-bar for the first time since entering the Santiago. It looked a likely hunting-ground, so we let the Turtle-hound loose. His unerring sixth sense enabled him to bring in several nestfuls, amounting to something over three hundred eggs.

That night it fell to Pedro to mount guard from sundown till midnight. Long ago we had given our timepieces away to the Antipas up the Maranon, for they were useless impediments. By the time each man of us had jumped overboard half a dozen times to save a paddle, a war-bag, or Ambusha, they were not much use except as presents. In the last-named capacity they were handed out to "Lázaro," Pitacunca, and one or two other important gentlemen. The original recipients kept the cases, which they hung around their necks, and distributed the wheels to their less favoured fellows.

During that watch of his Pedro had no peace. Every few minutes the siege would be renewed. With smiling faces our friends would beg for a canoe to cross the river for one of a hundred purposes, urging reasons which were apparently so pressing as not to allow of even waiting till dawn. They had heard a troupe of night monkeys on the other bank; they had spotted a fine log for the fire five hundred yards down-stream (always *down*-stream!); they thought it would be a good idea to have some fish for breakfast; they were sure that the turtles would be out on the other end of the sand-spit, and they could approach noiselessly in a canoe . . .

and so on, until Pedro called me up in despair. I kept them quiet with a long story about the dangers of going off alone in the dark, with the possibility of a Huambiza surprise at any moment. I treated them in the only way possible, like children, meeting them on their own ground. Neither I nor Pitacunca believed our own words, much less those of the other. But the game of bluff had to be played out, like any other game, and the hardest bluffer won. So passed the first of a series of such nights, always the same farce had to be staged; endless machinations met by endless argument. At length, after four or five nights had passed in this fashion without any success being attained, it dawned on the Indians that other tactics must be adopted if they were (in the language of sport) to make a get-away. They began to fall sick, and with remarkable ingenuity discovered that the waters of the Santiago brought on all manner of ills, from loss of appetite, by way of general debility, to heart-failure. Still we persisted, keeping them at the paddles after the fashion of galley-slave drivers. They were by this time a miserable, dejected crowd, keeping any way on the canoes, complaining of their ills, and bemoaning the certain death that awaited them if they continued.

On the eighth day the climax came. We sighted an island, which seemed to be ideal for pitching camp, and put into shore with the intention of deciding once and for all, what we were going to do with those treacherous and demoralized creatures who moaned and babbled between every half-dozen strokes of the paddle. But we were not destined to play an active part in the settlement of the problem, after all, for no sooner had we landed and lain down to rest than Pitacunca, by virtue of his high office, had resort to the never-failing *hayahuasca* (bitter wine—*Inca*). The plant is the means by which the medicine men of the Upper Amazon throw them-

selves into a trance (in reality a state of drunken semi-torpor) from the depths of which they utter prophetic statements which are received with as much reverence as were ever those of the Sybil. Their power for good or evil is thus unlimited, for they pour forth their visions to a spell-bound audience which hangs on every word.

That night Pitacunca was determined to go no further. He drank his *hayahuasca* with his "prophecy" prepared. Within a minute he was rolling about on the ground, groaning, vomiting, sighing, and wailing out his awful warning to a concourse of terror-stricken individuals, who wished they had never been such fools as to venture up the Santiago for the sake of a shining axe.

"Your homes are on fire and your families fleeing through the woods," wailed Pitacunca, his voice rising above the moans of his audience; "the Huambizas have taken off half your wives into captivity; but far worse than all the Huambiza devils in the Santiago valley, comes the news to your fugitive children that they are running from their attacks only to be stricken down with smallpox that walks abroad among our people (renewed groans); hungry and homeless, they know not where to turn (a positive hurricane of wailing); black ruin and death await you all, if you return not to stem the tide of disaster."

With a final long-drawn-out sigh, Pitacunca ceased. But he had done his work. Panic ran riot in the camp. Muttering and whimpering, the Antipas ran hither and thither at the bidding of the drunken old fraud who professed to be their protector. We saw that it was useless to expect to get another minute's work out of them. Pitacunca, with an invincible superstition at his back, had won the day.

Among all the Jívaro tribes the medicine man is omnipotent but short-lived. He lasts as long as his

prophecies are not too disastrously wrong. Sooner or later he leads his people (of whom he is virtually chief) into disaster, having made a bad guess, and is sacrificed by those who before followed his every word. Plain proof of the blind credulity of his followers is to be found in the manner of his qualification for his office. Some ambitious old fake with his eye on the coveted post takes a reed-flute (the only instrument except the tom-tom known to the people) and (according to his own story) goes off down the river at dead of night, alone, for many miles, where he seats himself on a sand-bar and plays till the anacondas come out of the water and dance round him. Many times he tries, until at length one morning he walks into the settlement and announces that his great powers have at last prevailed, and he has enticed the serpents to his very feet. And so his authority is born. In times of peace he is the official weather-prophet and astrologer, indicating the proper phase of the moon in which to plant; he is the one and only *jambi*-chemist; he is the doctor, with a forest full of remedies at his command, and it must be added, in all fairness to him, that he understands the use of *ipecacuana,* quinine (*béllaca-cara* in *Inca*), and a number of the natural drugs which he extracts from the forest, some known to modern science and some not.

He is at his best as a curer of ills. Several times we had occasion to call in Pitacunca himself and he made speedy and efficacious cures, albeit with a great deal of hocus-pocus on the side. Once Morse was suffering from an ulcerated tooth, and "Pete" volunteered to cure it in a few minutes. We had much ado to persuade the patient to allow the treatment to commence, and still more to allow it to go on. Morse was stretched out on his back on the sand, and the

"doctor" sat down by his head and commenced a chant. At the end of each verse he sucked his patient's cheek noisily, and proceeded to produce from his own mouth an ant, a shell, a good-sized spider, a snail or a small crab, after which he would show us what he had "extracted" and go into a fit of violent vomiting. Then another verse commenced with the same result; and so on, until he had produced a hatful of insects, dead or alive, after chanting some twenty verses. Meanwhile it was all we could do to keep Morse down. Finally the "doctor" chose a live coal from the fire, blew it to a red heat, and asked Ed. to open his mouth. The latter took one look at the offer and jumped to his feet. After it had been carefully explained to him that he was not expected to swallow the burning ember, but only allow it to be held, in a mussel shell in his open mouth, he assented. Then came the real cure. Pitacunca broke up into powder some fine leaves (I didn't learn what plant it was) and scattering them on the hot charcoal, held the latter in Morse's mouth so that the fumes from the leaf powder passed round the bad tooth. The pain left him within five minutes and never returned. If it was a coincidence, it was a very remarkable one.

On another occasion, I myself had been bitten by a fly which deposits an egg under the skin which grows into a fat worm. I was suffering from the repeated attacks of the grub, which was embedded in my back. Once more Pitacunca volunteered assistance, which I gladly accepted. He asked for a cigarette, which I rolled and proffered him. He smoked it and blew the smoke through a fluff of cotton causing the nicotine to condense. The usual incantations commenced, and continued for about ten minutes (as many verses sufficed, apparently, to extract a worm!). With his

mouth close to the spot where the worm lay, he made a funny indescribable noise understood by the worm to be the only tune worth coming out to hear, applying the cotton at the same time. Well, out he came, sure enough (driven out, no doubt, by the nicotine, to whose cleansing qualities I have referred before).

In times of war, the medicine man accompanies the fighting men (he fights himself, too) to cast spells on the enemy, to foretell victory (invariably), and to render his comrades-in-arms immune from hostile influence. Finally, he alone can make the pots in which the fruits of battle, the heads of the enemy slain, must be treated. Of this I shall speak later.

To return to my tale, then, the canoemen had to go. But we were determined that they should not carry off with them the wage which they had done so little (and that little so very unwillingly) to earn. It would be a bad precedent to set, for, if ever we had occasion to need their services or those of any other of their tribe again, we should start at a disadvantage if they thought they could fool us, as they certainly did, despite our precautions.

We made them build us a shack that evening on the island, and next morning a permanent shelter on the mainland, in which to cache part of our stores against our return, being unable to paddle so great a weight up-stream without their help. They all worked hard and with a good will, for freedom would be theirs within a few hours. Then we broke the news to them that they must return their axes and machetes, having failed to keep their contract. After the usual pow-wow they were handed over. It was not so peaceable a transaction as it might have been, for we had to hold them up with our rifles before we could make them give up our property. And then they went

It was not till they had been gone two hours or more that we had the idea of opening our cases of stores to see that all was in order. Half the axes and machetes and three-quarters of the poison had gone. Now the boxes and cases in which they were carried were purposely fastened with long screws, the secret of which we had not thought that any savage would discover. But, too late, it dawned on us that I myself had been indiscreet enough to open a box one day when that old thief Pitacunca was looking on. So, day by day, as we had been pushing up the Santiago, more and more stores were carefully extracted (the Jívaros using the very machetes we had given them as screw-drivers in just the same way as I did myself) and cached as we travelled along in the heavy verdure which lines the banks of that river. So it happened that they drew ten times the pay they had contracted for, after all. It was too late to do anything in the way of revenge. Had we had a speed launch at hand, we might have caught those stalwart robbers, but hardly otherwise. They must have reached home in one day's paddling. We never saw Pitacunca again.

The loss of that fine poison which Morse and Iberico had gone to such pains to obtain in the Huallaga River and bring along with the *Exploradora,* rankled in our minds for many a long day, aggravated by the thought of the sweet revenge which we could have taken, had we known in time, by appropriating that fine canoe in which the Jívaros escaped and turning them loose to their own devices on the bank.

Next, we were confronted with the loss of the Peruvians, Pedro and Iberico. The day after the Indians went they confessed that their keenness for exploration had suffered under the oppressive thought of what might be awaiting us up-river. The desertion of

Pitacunca's party was the last straw. They too were going—and the sooner the better. We raised no objections, for an unwilling horse throws the whole team out of stride. They were outside the circle of the camp fire to a certain extent also, for we five who constituted the remainder of the party always talked in English. Jack Rouse would never have learned a word of a foreign language had he lived to be ninety. The nearest he ever got to "talking the language of the country" was to put a Spanish termination on an English verb. "Let the beggars learn English," he would say on all occasions.

So that same day, October 10th, the two set out. I have a record of this incident.

"At ten o'clock this morning (by the sun) Iberico and Pedro said 'Good-bye.' They left for Barranca in one of the smaller canoes, leaving us with only two. They seemed to regret leaving us in a way, but their departure was not exactly a surprise, for they have shown distinctly less interest in our progress for some days. Yesterday, when Pitacunca dipped his paddle on the way down-stream, I fancied I detected a suspicion of envy in their eyes. Now at any rate, we are reduced to the absolute minimum, and progress will be slow."

Before leaving that camp, we did some prospecting on the shores of the island, and found the first gold of the trip. Jack had often panned out colours, but nothing more. Despite our success we had no intention of halting here at this time longer than was necessary to follow up the first indications. In the course of the next three days we scraped together between three and four ounces. So things began to look even rosier than they had on the day in Borja when we found a good-sized flake of pure metal in the gizzard of a

paujil. (Whenever we killed one of the big birds, Jack would always pan out the contents of the gizzard.)

Our operations were interrupted on the fourth day.

Early in the morning, Jack and Ed. went off in one of the canoes down-stream to look for turtles' eggs on a sand-spit a few hundred yards away. Game and I were preparing to put off in the other to go up-stream and look for indications of the Indians, or gold, or turtles, or anything of interest. We were of an enquiring turn of mind in those days. Now Jack was not noted for displays of emotion of any kind. (He was then forty-eight years old, and had never seen his parents since he had run away from them when he was fourteen.) So when we saw him jump to his feet in the canoe and begin waving his arms and shouting like a maniac, we guessed there must be something rather unusual happening. A bend in the river hid from our view the reach below where they were, so all we could see was a single dugout making for the island as hard as two apparent madmen could propel it, while at intervals the occupants would stop paddling, stand up, and point their rifles menacingly at some pursuing power which was for us a mystery.

We jumped into our own craft and made for the island, so as to meet Jack and Ed. A few strokes across the current brought us there before they grounded. We turned to look down-stream from this point. Sweeping along under the right bank came fifty-five Jívaro canoes in single file, a huge serpent moving with perfect rhythm.

CHAPTER XX

WAR

A game of bluff—Tuhuimpui declines a drink—The electric eel—Sea-beans—Vanilla—An interrupted sleep—Charred wood—Yacu-Mámam smiles—We take to the woods—*Huito*—The war-dance—Yacu-Mámam smiles again—A hideous company—Game has trouble with his shoes—The attack.

TUHUIMPUI, as we soon learned was the leader's name, landed on the point of the island, stuck his spear head-down in the sand, and advanced for a friendly pow-wow. His great following had shown a keen desire to overrun our refuge at his heels, but I had ordered him, at the first sign of such a movement taking place, to command his party to retire to the main bank, and await the result of our parley. We were perfectly safe as long as we kept a strip of water between us. So the pow-wow began. The Aguaruna chief bore himself with conscious pride of office. His manner had not a trace of servility. He, by reason of his position and his knowledge of *Inca* had been elected as spokesman, and he was every bit as good as any *apache*.

"We have heard that you have come searching for gold," he began. "Here on this river are very many Huambizas, evil men, who kill the *apaches* and steal their women. I myself have talked with the *apaches* and been to Barranca, and I know. You will be killed, so we have come here to take you back to safety. The Huambizas carry weapons such as yours" (indicating by signs and sound the firing of a rifle).

"I have heard," I replied, "of the great chief Tuhuimpui down-river, and know him to be a friend of the white man. Clearly has he proved his friendship once more by coming on this errand fraught with perils to give us his advice and protection. To prove our mutual regard, we must drink together."

The rum-barrel is produced, and a stiff drink handed out.

It is a curious fact, and one which throws a good deal of light on the much-discussed alcohol question, that any ignorant savage in the world will appreciate to the full his first drink of rum. It would appear that there is something in the natural constitution of man that answers to the call of alcohol.

"I would have you know," I went on, "that we appreciate your offer, but that we fear no Huambizas nor any other; we come in peace, but if attacked we know how to defend ourselves."

The chief retires to the water's edge, and calls across to a fellow chief to put over to the island to consult with him. In the long line of canoes the warriors sit, watching the proceedings.

"Midia, midia," cries Tuhuimpui (come, come), and an Antipa chieftain steers his canoe across the stream.

I have joined my comrades in the shelter and we discuss my interpretation of the pow-wow. We decide that we must try and get the whole war-party to go up-stream with us; their help would be invaluable.

In a few moments I am back talking with Tuhuimpui, who has returned from his conference with the Antipa.

"We are a war-party, come to kill the Huambizas."

Tuhuimpui turns with childlike simplicity to this new story.

"We will help you, then, for they are our common

enemy," I answered. "Let us join forces and push on together."

Thus we struck a bargain. We were far from being deceived as to what was the real object of our new allies. Once more that canoe-load of presents was shaping the destinies of men. But all the same it suited us to avail ourselves of their help to penetrate further up-river, laden as we were with heavy stores.

Next morning we started. All day long we sat and watched the great rhythmic strokes of the paddles, as the canoes flew along. Our escort was composed of some two hundred men of the Aguarunas and Antipas, evidently two parties which, finding each other bent on a common mission (which needs no explanation) had joined hands. By day they mingled so that there was no distinguishing the two parties, but by night they camped apart, suspicious, probably, of each other for they are natural enemies. Each carried with him a new loin-cloth, a rouge-pot, feather ear-ornaments, a *zápara* (rattan basket—*Inca*) of *giamanchi,* a spear, and a half gourd for a drinking-cup. Some had blow-guns with them also. They were for the most part naked. They were an impressive-looking crowd, and they took very little notice of us white men, with the exception of their chiefs with whom we had all our dealings.

The first day, everything seemed to go swimmingly. In the late afternoon we drew up on a sand-bar and pitched camp. Tuhuimpui volunteered to provide the game throughout the journey, and he certainly made a good start that day. He advised us not to use our rifles for hunting, as they might carry news of our whereabouts to the Huambizas, which seemed to us fair enough. We had our choice of supper from a great pile of game of all kinds—turkeys, pheasants, monkeys and wild hogs, principally—and selected what we wanted

before the rest was removed from before our tent. After supper, the chief came along with a basin-full of *giamanchi;* we were to drink deep of the comforting preparation and sleep in peace, while the Indians kept watch all night! To escape from this doubtful blessing, I mixed a cup of condensed milk as a counter offer. If there is one thing which a Jívaro abhors it is canned food in any shape or form. The trick worked, for no more was said of drinks that night.

And how could he be expected— I went on, after disposing of the *giamanchi* difficulty—to find the guard all night, and leave us to sleep in slothful ease? Surely to this we could never consent. We would do our fair share. Indeed he must warn his men not to approach to within fifty yards of our camp, for our sentries would fire on suspicion—and who could distinguish between enemy and friend at night? In the common cause we must take half the burden on our shoulders, and we must carry it well. Too much care could not be taken now that we were so near the enemy, and what a disaster it would be if in our zeal we killed some of our own friends! No, there was no getting away from the fact that they must be very careful not to approach our bivouac at night.

Day after day we pushed on up-stream, moving too quickly for Jack to get a chance of prospecting the likely spots. It may at first sight appear strange that we should not deliberately *make* enough time to search for gold indications in a systematic way, but the fact was that we were making such fine progress with the aid of the large war-party with which we had joined up that we were very chary of interrupting the impetus of our forward movement, which began each day at sunrise and continued till just before sunset with only one halt for a drink at mid-day. As regularly as clockwork we

"marched," like a company of troops; the discipline of the savages, though of a rough and ready kind, was evident from the manner in which they obeyed their chiefs. We white men left them strictly alone; we felt like guests at a hunting party. They knew the country, and had their own plans of attack, with which we must fall in if we were to hope for success. So we relegated the leadership of the expedition to Tuhuimpui and his fellow captains.

Night after night we had to exercise the greatest care so as to foil, peacefully if possible, the infinite variety of tricks by which the Jívaros attempted to obtain possession of our equipment. Our powers of diplomacy were strained to the utmost limit. It became more and more obvious that what we carried with us was a greater attraction than anything the Huambizas could have. Our heads, too, would make just as fine a set of trophies as any others.

Our camp was always pitched apart from the rest. Even so, they might have rushed us if they had had the courage of the North American Indian, or the immortal "Fuzzy-Wuzzy." But no one of them could be found to face certain death that his fellows might win the day. This we knew, and herein lay our security, for if it came to a question of numerical superiority we were lost.

One day we came to a place where the river had cut a new channel and left the still warm water in a loop of the old bed. Here we had a chance of making some highly interesting experiments with that freak of nature, the electric eel. The water at this point was teeming with these fish and with rays, both of which are considered as great delicacies by all who inhabit the banks of the Amazon rivers. The former grow to an average length of three to four feet, being as many inches

thick. They seem to have no entrails except one straight canal, about the thickness of the little finger, which runs along the underside of the body from the head to the vent. Their general appearance is similar to the common fresh-water eel; they are slow swimmers, and therefore an easy prey to the spear. They are so heavily charged with electricity that a man cannot possibly retain his hold of a metal instrument if it comes in contact with their skins, or even with a metal pail in which one is swimming. Of course I was carrying with me no electrical instruments with which to test their voltage, so could only measure the force of the shock they can give by touching the fish myself. With my machete I attempted to cut the head off one which had been speared and landed. I might just as well have tried to cut a trolley-wire with uninsulated pliers. The machete flew out of my hands and my arm was temporarily paralysed.

We finally picked up a small eel two feet long, and put it in a pail of water. We satisfied ourselves that it was perfectly safe to touch the fish, the pail or the water with a wooden stick, tending to prove that electricity is generated, and that the shock is not due to any form of vibration.

Their peculiar internal organism makes it possible to prepare them for eating by simply slicing them as one does a loaf of bread, no cleaning being necessary. Their meat is pure white and firm, and they make an excellent dish when fried. In this respect they are superior to the rays of which we also caught many.

It has occurred to me that the risk of swimming any stream infested with electric eels would be very great, for, as the natives of the Amazon basin confirm, they attack and kill other living things with the strong current with which nature has charged them. Two or

three such shocks as I myself received would be enough to paralyse the muscles of the whole body and cause death by drowning. In saying that these fish attack other creatures, I do not wish to infer that they are either carnivorous or vicious—merely that they use their natural powers instinctively in self-defence.

It may be worth mentioning that it was here that I discovered for myself, with no previous knowledge on the subject, that those beautiful coffee coloured seeds which are picked up both on the Atlantic and on the Pacific shores of the two Americas, and are known as sea-beans, grow in huge quantities along the banks of the Upper Amazon and its tributaries. They grow in a pod like peas on a plant and when seeding time comes round large numbers of them fall into the water and begin their journey of several thousand miles. They are, of course, treasured by many people as a gift from the sea, which, strictly speaking, they are not. Doubtless they abound on the banks of many other tropical rivers. We put them to no practical use, but it was at least amusing to find "sea-beans" over three thousand miles from the sea by the course they have to follow.

Many a time, too, on that journey up the Santiago, exploring the vicinity of our camp, while the Indians were out with their blow-guns after game, we came across fine vanilla-plants. These plants grow there in profusion, clinging to every kind of tree. The pods are twelve inches in length, being fatter and more fragrant than the ordinary commercial article. Their flower is like a small orchid, to which family they belong. The dark humid forests of the Amazon produce enormous numbers of beautiful specimens of every member of this same family, from the huge scarlet bell-shaped variety of the plant which weighs upwards to

a hundred pounds to the tiny purple specimens, somewhat like a violet in form, which cling in great masses to the roots of the trees and vines. Curiously enough, I was never able to find one that gave off a pleasant scent, though many times did I come across beautiful blooms with disagreeable odours. For the orchid collector, this would indeed be a wonderful hunting ground.

A fortnight had passed since Tuhuimpui and his men had joined us. We were becoming a little easier in our minds about the attitude of the Jívaros toward ourselves. They seemed to have realized the impossibility of getting the better of our vigilance, and to have turned their attention to the question of attacking the Huambizas with a heart as we approached nearer and nearer to the zone where we expected to get in touch with them. They wore an air as of men disappointed of their first objective, but determined to make the best of a bad job.

On the evening of October 23rd Morse and I went off up-stream a few hundred yards to take a look round the next bend, the party having halted for the night earlier than usual, to make a careful search in the forest for indications of the recent presence of the enemy. We had a curious experience with an anaconda (the fourth and last which I found alive in the Amazon basin). I think the incident is worth recording, as being unique in all my travels, and as showing how inoffensive these great reptiles are during their period of dormancy. I cannot do better than quote from my original impressions:

"Having sighted the great reptile coiled up on a fallen tree which lay half in the water, half on the bank, we paddled quietly up to within a yard or two for closer inspection. It lay in a pyramid of coils, apparently sleeping. Surprised that it did not move, we splashed

water on it to wake it up; there being no result, I started to prod it with my paddle, and still meeting with no success, I lifted my paddle and brought it down on the snake's side with a resounding whack that actually broke the blade. It squirmed a little, but soon lay still again. Determined to get a closer view, I climbed out on to the log and kicked the fat black coils. It showed some signs of animation, so I got back into the canoe and continued to prod it. Finally it awoke, slipped into the water while still half rolled up, and swam leisurely away on the surface, giving us a good chance to judge its length. Comparison with the twenty-four foot canoe showed it to be some thirty feet long. Its indifference to our attacks was amazing, in view of our previous experiences of the same species on the Yasuní. Moreover it did not appear to have eaten recently, no swelling being apparent."

I did not enlarge very much at the time on the impression which the experience made on my mind, but it has stayed with me ever since in a very vivid form. It would appear that at one season of the year this otherwise alert, powerful, swift-moving creature lives in a state of slothful torpor from which nothing but the rudest shock will awake it. The contrast is astounding, and in this particular case all the more so, as there seemed to be no outward sign of any reason for the anaconda's dormancy. It was long and thin (thinner indeed than the three others I had seen). It might have been expected to uncoil and lash out at the first sign of our approach, but instead it behaved like a tame angle-worm.

While on the subject, I recall a story which the semi-civilized Indians on the Napo once told me. A canoe full of them was actually attacked by a great anaconda, overturned, and swamped. When the crew had swam

to shore they found that two of their number were missing, nor did they ever appear again, alive or dead. It was commonly believed that the snake swallowed them, as they were strong swimmers. I must add that I cannot vouch for the veracity of the tale, nor does it appear at all certain to my mind that these reptiles will attack men. If they do, the big one we saw on the Yasuní certainly missed a fine chance.

On the 26th of October, no sign of the Huambizas had yet been seen. During the morning of that day we were paddling along in the usual formation, Indian file, when suddenly a commotion started among the leading canoes, followed by a "trombone concert." Something which had been picked up out of the water was being handed round for inspection. On pushing up to the front of the column, we found that the centre of interest was indeed worthy of attention. It was no less than a piece of charred wood. So at last we were in touch with the enemy. After a lot of talk it was decided that we should push on and try and find the probable point from which it had drifted.

Paddling ahead for the remainder of the morning, we halted on a very long sand-bar for a mid-day rest. There was a feeling of war in the air. The Jívaro party seemed to have settled down at last with a will to the prospect of attacking their long-standing enemies. There remained but one stepping-stone to be crossed before they would reach a state of white-hot zeal for the attack—the omens must be read.

The meal over, the Indians disappeared into the forest which came down to the edge of the sand. In a few moments they were back, each man carrying a branch from a tree which bears a small green berry. (I was never able to identify it.) Some of the berries they stripped from the twigs, and the branches them-

selves they planted in the sand in a long straight line parallel with the river. Tuhuimpui strolled up to me unconcernedly. "We are going to make it rain," he said simply. "I hope you will not bring down enough to drench us and our cargo," I said with mock solemnity. "Never fear," came his grave answer, "only a light shower. To-night it shall rain and thunder and blow, but before we summon the storm, we shall build you a house."

I was taken aback to say the least of it, for it seemed to me that he had very little hope of success, for all the effect a row of branches would have on a clear blue sky, the same sky which had smiled on us since we turned up the Santiago from the Marañon. In deference to his gravity, however, I said nothing more. On the contrary, I persuaded Jack and the rest to come along with me and take part in the show. So we cut our branches (we were not allowed to bring any but the right kind) and planted them.

The berries which they had pulled the Jívaros put into snails' shells, and threw into the river with a good deal of tom-foolery in the way of chanting and solemn gesture. (We used to call this kind of thing "monkey-business").

And then we simply embarked in the canoes and left the playa to itself.

Within half an hour, gentle rain fell. A light cloud had gathered I know not whence for the first time for three weeks. Now it may be said that it was a pure coincidence, but it was at the same time very strange that Tuhuimpui's efforts should so strikingly produce a result after so many perfect days had passed. It should be remembered that the rainy season does not set in, properly speaking, until the middle of January. Even down to the smallest detail the Aguaruna chief was right.

The gentlest of sun-showers fell that afternoon—enough to freshen us all up, but only enough. Morse and I discussed the process of rain-making with the Indians. We discovered that Tuhuimpui had been making a test of his favour with the god *Yacu-Mámam,* the controller of Rivers and Rain, and that had he left the newly cut branches planted in the playa below to wither and die, our attack would never have been made. Without the River God's help, disaster would have overtaken us; but this gentle shower to refresh the tokens planted for his favour was his answering sign of approval and protection in their mooted ventures.

"You see the power I wield," grinned Tuhuimpui, finally. Suddenly his manner changed. Gravely he gave utterance to the sentiment which lies closest to the heart of every Jívaro. "Now indeed we shall return with many heads" . . . . But in a moment he was boasting again. "This is nothing to what will fall to-night," he said mysteriously. "It will thunder, there will be lightning; a great wind will blow; a storm will rage; *Yacu-Mámam* will smile on me."

We began to think there might be something in what Tuhuimpui said after all, but the thought passed and we were soon joking about "those mighty strong houses we should have to build to keep the rain out."

By six o'clock that evening we had found what the Jívaros had been looking for since we picked up the piece of charcoal. We discovered the mouth of a stream which ran into the Santiago, covered so effectually with heavy undergrowth that it was invisible from the centre of the main river. Why, I do not know, but the Antipas and Aguarunas who guided our destiny decided at once that this was where the enemy was to be found. So a scouting party of four picked men was told off to take a canoe and spy out the land. They slid off noiselessly

and disappeared in the gloom of the forest vault, moving with the catlike stealth of men who know that detection means death.

The chiefs signed to the rest of us to make for the bank of the Santiago opposite the mouth of the stream. Here we left the canoes, climbing ashore with great care on logs which had fallen over the bank, so as to leave no trail. Tuhuimpui was very particular that we should land in this way, himself supervising the operation. Next, a party of Jívaros collected all the canoes, moored them to the trees with *bejuco* strands, and half-filled them with mud dug from the water's edge. They sank from sight one by one, until of all that gallant array of craft there was no sign left. The *bejucos* appeared to be but vines which had lost their hold and fallen into the river—only a tiny detail of the vast network of tangled undergrowth which chokes the forest from end to end of the Amazon basin. The Antipas withdrew in the tracks of the main party which had moved into the forest, and anyone passing the spot in dugouts five minutes later could never have suspected the presence of a war-party.

Dusk was gathering by this time. Tuhuimpui, in solemn preparation for the storm which was due to rise, ordered the building of shelters for all his men and a specially well-built one for his white allies. In an hour the camp was pitched—one half for the Aguarunas, the other for the Antipas, our own shelter in the middle. Each of them was about thirty yards from us. We set to work to thin out the undergrowth all round our camp by way of precaution. There was no knowing what these friends of ours might be doing if rain fell a second time at their bidding! We felt cramped, too, and hedged in by darkness after the safety of the river and the open *playas*. I think as a matter

of fact, that in their anxiety to be after the Huambizas, they had by this time forgotten us more or less, or at any rate relegated us to a place of secondary importance; we should come in handy after the Huambizas had been routed, perhaps.

Be that as it may, we detected no suspicion of foul play that night, though not one of us slept in the inky blackness of the forest. Anyone who has walked through a long railway tunnel can appreciate the blackness of the woods at night. This is the nearest comparison to anything in the world as we know it that I can get. Both tunnel and forest are clothed with that absolutely palpable gloom which seems to have its being, not in the surrounding space, but in the very retina of the eye itself.

We lit fires round our shelter, as the Jívaros themselves had done, and sat up for many an hour, spectators of the weirdest scene I have ever witnessed.

Tuhuimpui arrived at our shelter with a great gourd full of what looked for all the world like chutney sauce.

"We are going to paint," he announced. A short interrogation sufficed to satisfy myself that this was *huito,* a kind of giant walnut, of which the outer shell contains a stain or dye, in just the same way as a butternut or a black walnut. The thorny root of a palm is used as a grater to reduce the outer shell to pulp. With this the skin can be dyed jet-black, simply by rubbing it in in the wet state. All the Jívaro tribes use it to paint themselves for battle, and are indeed loath to attack without doing so. It may be that they want a distinguishing sign so that in the excitement and confusion of the fight in close country a glance will suffice to tell friend from foe. I think, however, that this is a very unlikely explanation of the custom.

It is more probably a part of the usual panoply of war in which all savage tribes indulge.

The same *huito* is used extensively in the small towns, villages, and posts of Ecuador and Peru bordering on the Jívaro territory, by half-castes who are not as dark as the Indians, nor yet as light as the Spanish. They (chiefly women) stain their faces, necks, arms and hands with it in the belief that when it comes off it takes some of the black with it! They go about their ordinary occupations with it on, it being accepted by all as powder is on the beach. So durable is the stain that only time will bring it off; three weeks or a month are required to efface it altogether. This temporary sacrifice of appearance is willingly made in their desire to cast off the taint of Indian blood.

We all readily agreed to paint up in preparation for the attack on the morrow. So we stripped, determined to do the thing thoroughly, and each saw to it that his companions did not overlook any odd corners. Even Jack's bald spot did not escape attention. The effect of the application of this dye is not immediately apparent. So it was not till morning that we noticed any change in our appearance. The rising sun, however, revealed to us the full possibilities of *huito*. Not only our skin, but even our hair and eyes seemed to have changed color overnight. We laughed till we were nearly sick. The Jívaros hearing the uproar, thought we were having a war-dance of our own. Tuhuimpui came over and inspected us, surveying with a face unmoved a scene the absurdity of which no white man could have resisted.

But to return to the night's vigil. A moment after Tuhuimpui left us, he returned to tell us of the safe arrival of the scouting party. The enemy had been

located. The scouts had approached to within a few yards of a small settlement and had actually counted the warriors. With consummate skill they had withdrawn unseen. Had I not had so many personal experiences of these men's amazing skill in scouting, I should not have believed it possible for any living thing larger than a humming-bird to approach within earshot of a Jívaro in the forest.

Having painted themselves from head to foot, the Indians began to prepare themselves for the war-dance. Each camp built a huge fire, and supplies of fuel for the long night were stacked beside the shelters. At a given signal every man leapt to his feet, grabbed his spear, and all joined in a great capering throng about the blazing fires; with raucous yells they danced and danced and danced, two bounding swaying circles careering round the blaze, spears shaken in grim emphasis of the threats they hurled at their unsuspecting enemies.

Now the whole crowd would be scampering round the flames, now a few tireless warriors who had outlasted their fellows; sometimes a solitary enthusiast would prance and yell to the delight of the squatting onlookers, uttering curses and vowing vengeance on the Huambizas who had stolen from him a wife.

Suddenly with a clap of thunder the promised storm broke on the scene. Here was everything that Tuhuimpui had predicted—one of those summer storms of great intensity but short duration which occur in the tropics alone. Once more the necromancer's spell had worked. Even as he had said, the wind raged and the rain fell in sheets to the accompaniment of the thunder and the vivid lightning. So great was the fury of the elements that we had to post a sentry outside our shelter to warn us of falling limbs. All around

the cave they came crashing down—any one of them enough to obliterate us and our puny cover.

In half an hour it had passed, and we were out again, uncovering the fire and restoring it to life while the dying wind swept the last drops of moisture from the forest roof. It had passed, but left behind in every Jívaro heart an undying faith in the prowess of their chief. Sure of their victory now, the savages bounded to the dance with redoubled energy, cavorting and pirouetting in a mad frenzy of hatred and battle-lust. All night long they kept it up, a pack of tireless demons. We on our part had no recourse but to sit with our rifles at hand and wait for dawn. Sleep had no charms for us while that waking delirium possessed the Indians, fanned to white-heat by the splendid augury of the storm.

It is useless for me to attempt an explanation of the prodigious success with which Tuhuimpui met that day. I cannot allow that it was merely a case of coincidence. The correctness *in detail* of his prognostications may suffice to confound that theory. No; either he knew by some sixth sense which many animals possess that there was rain somewhere near (a thing almost unbelievable, since there was apparently no difference in the barometric conditions of that day and the preceding days) or else he was able to detect the coming of the rain by a minute observation of the movements of certain animals, or even insects, signs which would mean nothing to any but the most highly trained child of the woods.

With the coming of dawn, groups of weary savages were to be seen lying about and preparing leisurely for the fight. Exhausted by the night's revelry, they seemed but poorly fitted for the trials of battle. But our ideas

of battle differ very markedly from theirs. The long strain of a modern engagement is a thing undreamed of by these lovers of cunning and surprise. For us it may be a matter of days or weeks, for them it is one of minutes.

Here and there they strolled round the dying embers, busy with rouge-pots, feathers and loin-cloths, black from head to foot with the *huito* which had taken effect during the night hours, their black pointed teeth bared in a grin of anticipation—a band of veritable demons straight from Hell. But grouped round the fire which still burned before the central shelter of the camp was a company of creatures which fell not far behind them. Tousled, bewhiskered, stained the same ebony black, we sat and cooked our breakfast. Game, it was agreed, outstripped the rest of us in hideousness. With his mop of sandy hair, a three month's old ginger beard, blue eyes, great thick-set body half-clothed in ragged shirt and pants, every inch of skin as black as night, he was indeed a fearsome creature. He ended his days long ago somewhere in the snowfields of the Klondyke, a fitting burial-ground for such a wild, untameable spirit as he. But his image as he was when the sun rose on October 27th, 1899, will live for many a long day to come in the memories of us who were his companions.

Breakfast over—for the Jívaros a drink of *giamanchi* sufficed—we all moved off to the water's edge. The moment had come for the attack. The savages with their new loin-cloths, rouged faces, tufts of *lumbiqui* feathers (red and yellow balls of fluff) in their ears, looked a formidable company. Quietly we raised the dugouts, and made across to a sand-spit which extended from the mouth of the stream, up which we were to go, to a point some two hundred yards down-stream, an excellent base for the day's operations. Here a party

composed of old men and boys was told off to guard the canoes. Of the latter I have said nothing. A few lads of nine or ten years of age accompanied the party to learn the art of war from their fathers. It was manifest throughout the trip that they were happy and proud to have been called to an apprenticeship in the chief business of life.

Led up by the scouts who had come in the night before, in a long single file, we made our way into the forest, and moved up the left bank of the stream. According to plan the savages split up into two parties, the Antipas made off into the jungle on a detour, to take as their objective the further of the two settlements which had been selected for the raid, while the Aguarunas clung to the bank of the stream, moving on the nearer. We (black) white men brought up the rear of this latter column under the personal supervision of Tuhuimpui, who lived in fear and trembling of our clumsy movements. Game alone, had he come within a quarter of a mile of the enemy before the surprise had been sprung, would have queered the pitch. It was one of his whims never to go barefoot, with the result that he was forever the victim of his own shoes. They caught in the vine-roots, they were sucked off his feet by the mud, they slipped in the moss and they were ever half-full of dirt—an interminable nuisance which their owner could never be persuaded to abandon. Tuhuimpui protested in vain, while Game went crashing through the undergrowth with the delicacy of a tapir. At last it was too much for our chief. He stopped us. We were to wait till the attack had begun.

No sooner had we halted than there came to our ears the *whang-whang* of a machete on wood. So we were actually within earshot of a settlement at last.

It is at this point in my narrative that I must pause a moment to make a few comments on Jívaro methods of warfare. They are utterly distasteful to the white man—the *true* white man who is brought up to a code of fair play. The attackers display no bravery, the attacked have no chance to defend themselves. As a cat creeps up behind a bird which is digging up worms, so the Jívaro attacks his enemy. A square hand-to-hand fight he will not entertain. With all his paint and feathers he is, unlike the North American Indian, a coward at heart. I must have given the impression in the foregoing pages that our heart was in the business; but such was not the case. We used the war-party for our own ends—they were our only means of getting up-river with our kit, once Pitacunca had deserted us. To have left them to attack the Huambizas alone would have been to stamp ourselves in their eyes as cowards. To have turned them from their purpose would have been to place ourselves between two enemies, each waiting as anxiously as the other for our heads. So there was nothing for it but to indulge Tuhuimpui's caprice in the hope that the affair would prove to be but an incident in our onward movement.

So we sat and listened to that single distant clanging of steel on wood, the only sign of human life in all that vast forest into which a moment ago two hundred men had melted. *Whang-whang* came the sharp-cut noise of the blade falling on a paddle which was never to be finished.

With a hideous yell the van of the attackers leapt from cover, a bare ten yards from the nearest of their prey. We jumped to our feet at a word from Tuhuimpui, and in a moment were rushing to the scene of the slaughter. (The moment was a tragic one for Game, who left his

shoes in the mud, only one of which he ever recovered.) We never fired a shot, either in attack or defence that day. When we arrived at the scene of action, we found that the settlement, a mere handful of savages, male and female, had been rushed. The game was up.

CHAPTER XXI

THE JÍVARO HEADS

The collection of the trophies—We retire—An antitoxin—An operation—Fires are lighted—Sacred rites—Hot sand—The festival of rejoicing.

A VICTORY on the battlefield is for these Upper Amazon Indians the signal for the most hideous, the most significant of all their rites to be begun. On that never-to-be-forgotten day the whole scene was enacted before our eyes, an experience which it has, perhaps, never been the lot of civilized beings to undergo before or since. That is a sweeping statement, and at the best I am only assuming the probable, but I can only say that neither I nor my fellow explorers were ever able to discover, directly or by hearsay, that this ghastly performance was ever witnessed by any other white men. Certain it is that in all my conversations with prospectors and rubber-hunters, I have never heard of any but the most conflicting conjectures as to the mode of preparation of the Jívaro heads.

The comparatively little that has been written about the process through which they pass—and they are relics of war which are unique in all the world—has been invariably, as far as my study of the question goes, based on the hearsay evidence, often incorrect in essential details, of the white or half-caste planters or priests whose lives are spent at stations situated on the fringe of the real Jívaro head-hunters' country, the basins of the Marañon and Santiago within a radius of some three hundred miles from Borja.

It would seem that this rite is so closely guarded a secret, by reason of the inter-racial hatred between white man and brown man, and the obvious natural obstacles in the way of him who would explore these regions, that the ceremony is destined to be observed only by a very few. It must indeed be a strange set of circumstances, in which chance must play no small part, which will combine to show a white man what we were compelled to observe.

Thus my account of the events of that day constitutes, if I may presume to say so, an authentic description of a process which has baffled many a commentator on the subject.

Those of the Huambizas, then, who had been fortunate enough to escape from the spears of the raiders had fled to the shelter of the largest of the little group of houses which had been attacked. There cannot have been more than ten or fifteen of them shut up within its walls, but the Aguarunas had not the spirit to attack them now that they were aroused. That is the Jivaro way.

The enemy having left their dead and dying behind them in their flight, the victors dashed forward to seize the most highly treasured of the spoils of battle—the heads of the enemy slain. With stone-axes and split bamboo knives, sharpened clam-shells (rubbed to a keen edge on sand-stone), and *chonta*-wood machetes, they went from corpse to corpse, gathering and stringing their gruesome emblems of victory.

I must mention that no delicate considerations of sex are allowed to interfere with these rites; a woman who fights, or a woman who refuses to accompany the victorious war-party to their homes and serve a new master, exposes herself by the acknowledged code of warfare among these people to the risk of suffering the same fate as her men-folk. Indeed I myself happened to watch

the fate of a Huambiza woman who had fallen in the fight wounded by three spears. Little did we imagine what the ultimate issue might prove to be, when we attacked that morning.

The woman lay where she had been borne down by the spear-thrusts. The Aguarunas, eager to collect her head, went to work while she was still alive, though powerless to protect herself. While one wrenched at her head another held her to the ground, and yet another hacked at her neck with his stone-axe. Finally I was called upon to lend my machete, a far better implement for the work in hand. This was truly an act of mercy, to put the poor creature out of her misery as soon as possible. It was a truly hideous spectacle. But it must be remembered that had we attempted interference, we were but five in a horde of fiends, crazed by blood and lust. When at last the head was severed, it was strung with the one other which had fallen to the lot of our party.

This stringing of the heads is in itself an art, the object of which is to facilitate their transportation. They are strung on thin lengths of pliable bark stripped from some nearby sapling, which make a first-rate substitute for the hempen cord of civilization. These bark-ropes are passed through the mouth and out at the neck.

The party then set to work to loot the houses from which the occupants had been driven. Nothing escaped the raiders. I was there in one of the houses with them, and well remember the motley collection of things that we found. There were Peruvian coins, china cups and saucers, a butcher's knife, a number of red bandana handkerchiefs, all evidently looted from Barranca, a Jívaro hand-loom with a half-finished piece of cloth on it, an iron spear-head, and a number of small Jívaro household objects which are to be found in any settlement. Nothing was too small to escape the Aguarunas' atten-

tion. They cleaned out the house from end to end, every man keeping for himself all he could lay hands on. Then they fired the roof, and in a moment the whole house was ablaze, the great heat roasting the decapitated body of the Huambiza woman.

It will be remembered that a party of Antipas had separated from the main body, as agreed between the Indians before the attack, to storm another group of hutments further up the creek. It was at this moment, then, that we decided among ourselves to push on after them and see how they had fared. We had not gone more than a few yards when we were met by the same party returning, laden with dripping heads. No less than nine they brought; some tied in pairs by their own hair and slung round the neck of one of their conquerors, others slung with bark-ropes. This gruesome procession was led by a short, fat savage; laden with his share of the spoils, grinning in triumph, with his teeth stained black and filed to a point, his thick-set shoulders spattered with the blood of his victims, he was a diabolical-looking creature.

It seems superfluous to mention that these people, like all cowards, are absolutely devoid of pity. However, they do not indulge in the worst habit of the old North American Indians, that of torturing their prisoners.

In single file the whole party retreated through the forest to the mouth of the creek where the canoes had been left, hurling threats at the Huambizas and admonitions not to follow, as certain death at the hands of the rifle-bearing *Christianos* awaited them—all this the merest bluff, it must be said, for in reality they feared an onslaught by their infuriated enemies who were believed to possess some form of firearms stolen from Barranca. To strike further terror to the hearts of the Huambizas, each man of our party indulged in a series of imitations

of the human voice guaranteed to give the impression that he was at least six men.

Arrived at our base, with the trophies and prisoners—three children—we settled down to the preparation of the gruesome spoils, destined to be displayed in the glass cases of some great museum or to pass into the collection of a curio hunter at the other end of the world. For, as it happened, they eventually fell to our lot.

While the warriors brought the heads from the canoes to the sand-spit on which they were to be prepared, the children sat round contentedly chewing bananas, all unconcerned at their parents' fate. With the empty canoes drawn up on the sand, outposts thrown out to guard against surprise attack, the sun blazing down on the whole scene, little groups of warriors formed themselves round the heads.

The ceremony commenced with the placing of the heads in the sand, face upwards; each naked warrior in turn seated himself on one of them and the medicine men, of which there were two with the party, commenced to chew tobacco (borrowed from me, I remember). Approaching from behind, one of them took a half-Nelson on the seated warrior, drew his head back, took his nostrils in his mouth, and forced a quantity of tobacco juice up his nose. This strange procedure is not without explanation; it is the local equivalent to an anti-toxin against the baneful influence of the enemy's medicine man, a form of protection which the natives firmly believe makes them immune from the disasters and plagues to which their foes can subject them. (I may mention that my firm resolution to take a personal part in the ceremonies faded before the nauseous picture of this, the first degree of that wild brotherhood. Jack aptly termed this performance "The Bull's Eye Degree.") The effect which this treatment had on the warriors was

at once exhilarating and overwhelming—the former on account of their unshakeable faith in its merits, the latter because of its natural physical results.

Recovered from their choking and gasping, the privileged few who had merited this nicotinous inoculation by reason of their having participated in the killing of the victims and dipped their spears in their blood, proceeded to peel the heads.

This is done by carefully parting the hair straight down from the crown to the base of the skull, slitting the skin down the line formed by the parting, hard on to the bone of the skull; turning it back on both sides, and peeling it from the bony structure just as a stocking is drawn from the foot. At the eyes, ears, and nose, some cutting is necessary, after which the flesh and muscles come off with the skin, leaving the skull clean and naked but for the eyes and teeth.

The incision or slit from the crown to the base of the neck, was then sewn together again, with a bamboo needle and palm-leaf fibre (the *chambira* from which the hammocks, ropes, fish-lines and nets are made), leaving untouched for the moment the opening at the neck. The lips were skewered with three bamboo splinters, each about two and a half inches long and lashed together with strands of cotton fibre, which held them tightly closed, in the same manner as the sheets of a sailing boat are fastened to the cleats on the deck; tassels being afterwards formed by the frayed ends of the fibre. The eyeholes were closed by drawing down the upper eyelashes. The eyebrows were held from falling by small pegs or props of bamboo, vertically set between the outer rim of the eyelashes (thus effectively holding them in place) and the shoulders of the corresponding eyebrows. The holes of the nose and ears were temporarily plugged with cotton.

The purpose of these several operations was to hold the features of the face in position and to seal the openings, so that the head could again be expanded to its normal proportions by filling it with hot sand and thus permit an even contraction of the whole in the further process of curing. The meat at the base of the neck was "basted" with *chambira,* to prevent its wearing and wasting away by handling in the succeeding operations.

In the meantime, several large fires had been kindled and numerous earthernware crocks filled with water were placed in readiness.

A description at this point of the ease with which the Jívaros start a fire by means of their primitive methods may be of interest.

A hard-wood stick is made to revolve at high speed by means of a bow whose string is wrapped about it, its lower end resting on a piece of pith. The necessary pressure on the stick is obtained by bearing on a flat stone which fits on the upper end of the stick, held in position by means of a small round hole which serves as a socket. The pressure of the stick on the pith sets up sufficient friction to cause the latter to smoulder, when it is easily blown into a flame. This simple equipment is packed with every party as we carry matches. But also, on short trips, the Jívaros carry with them a smouldering hornet's nest, at the end of the branch on which it was originally built, which serves the double purpose of a kindler and of a protection against the swarming myriads of sand-flies and gnats which infest the shores of some rivers during the summer months.

The crocks which are used on these occasions have been made with the utmost care by the medicine men in person, far removed from all human eyes and under auspicious lunar conditions; they are brought carefully

wrapped in palm-leaves to ensure the impossibility of their being either touched or seen by any unauthorized person until the moment for the ceremony arrives. For every head there is one of these red, baked clay, conical pots, some eighteen inches in diameter by eighteen inches deep; the apex of the cone rests on the earth, the sides being supported by stones; in this way the fire has ample access to the greatest possible surface.

The pots were filled with cold water, straight from the river, and the boneless heads filled with sand placed in them. Within half an hour, the water had been brought to a boiling-point. This was the critical moment. The heads must be removed before the water actually boils, to prevent the softening of the flesh and the scalding of the roots of the hair, which would cause it to drop out. The heads, on being removed, were found to have shrunk to about one-third of their original size. The water, I noticed, was covered with a yellow grease similar to that which forms when other meats are cooked.

The pots were cast away into the river, too holy to be put to any further use, and the fires were heaped up with fresh logs, to heat the sand on which they stood. For henceforth the sand played an important part in the proceedings.

Meanwhile, those who had been treated, or initiated by the medicine men, namely the participants in the actual kill, were privileged to hold a special ceremony of their own; the naked skulls were taken off, and each group retired a short distance to hold the sacred rites which follow the boiling of the flesh-heads. We were not allowed to participate, as is to be supposed, and furthermore, the temper of the Indians at that particular moment was not conducive to too close an observation of their doings on our part; we were, indeed, convinced by this time of the very real desire which shone through

the eyes of our brothers-in-arms to add five more heads, as well as five rifles and a canoe-load of presents, to the day's booty. It would appear that some form of muttered parley took place, a serious business in comparison with the wild caperings which follow when the skulls are brought back to the main party. The interpretation of these rites was undiscoverable by reason of the fact that the Chief, the sole interpreter among the Jívaros, was far too busily occupied with an attempt to persuade me of the absolute necessity of our going down-stream not more than one white man in any single canoe! The childlike simplicity of these people's natures, the blatant transparency of their ruses, is only another proof of their close proximity to animals.

So the skulls were brought back and stuck on spear-heads, the spears standing upright in the ground, and around them took place a dance, celebrated by all and sundry with wild yells, and the throwing of spears across the skulls from one warrior to another. We had to play our part, leaping and shooting our rifles into the air—but not more than two of us at a time exposed ourselves to the obvious risk of some accidental spear-thrust! With all of us in the ring together, the Indians would have made short work of the party.

By now hot sand had been prepared in large quantities. This was poured into the heads at the neck-opening and while thus filled they were ironed with hot stones picked up with the aid of palm-leaves. This process, which began that day on the sand-bar, is continued in the ordinary way for some forty-eight hours until the skin is smooth and hard and as tough as tanned leather, the whole head gradually shrinking to the size of a large orange. The resemblance to the living man is extraordinary. Indeed, the reduced heads, when skillfully made, are exact miniatures of their former selves.

Every feature, hair, and scar is retained intact, and even the expression is not always lost. When perfected, they are hung in the smoke of a fire to preserve them from the depredations of the multitudinous insects which would attack and demolish them. As I noticed that afternoon, however, the preservation of the features in their former shape is not always the object of those who prepare them; some of the Aguarunas were to be seen deliberately distorting them while they were still flexible, as if in mockery of their enemies. They took a particular pleasure in distending the mouth, which accounts for the expression to be seen on many Jivaro heads.

Into the late afternoon the careful preparation of the heads continued. By this time, all were working with a will to cure them, so that a start down-stream could be made that evening. Time and again the cool greasy sand was poured from the half-dried heads, giving out the odour of an evening meal, only to be refilled with a fresh hot supply. Flat stones were always in the fires, being heated for the constant ironing to which the faces were subjected; they slid easily over the skin, like a flat-iron on linen, due to the natural oil which exuded from the contracting pores.

Hot coarse pebbles were substituted for sand in the final process, the heads being constantly tilted from side to side to prevent them from burning the meat, as dice are shaken in a box. The small amount of oil still exuding on the face was now wiped away with fresh cotton as fast as it appeared and the operation continued until all the fat and frease was "fried out" of the head when it was considered "cured" or mummified; shrunk to the last diminutive size attainable.

Even the captive children were playing round the fires, innocent of the hideous import to them of this, the most tragic moment of their lives. Little did they

realize that in a few years' time they would themselves be called upon to kill and behead their own kin. Already they were friends with their captors into whose family they had been merged forever.

Thus ended a day unique, I verily believe, in the history of exploration.

I will add a few remarks concerning the ultimate fate of the trophies whose early history I have told.

The Jívaros never take adult male prisoners, but the women and children who are caught in the periodical raids are given the same standing in the victorious tribe as those who are born into it. Polygamy is forced on the Jívaro peoples by the constant drain on the male population caused by the incessant inter-tribal warfare. But for polygamy they would soon become extinct.

What the scalp is to the North American Indian, the battle-standard to the civilized warrior, the heads are to the Jívaro. But the comparison is only true up to a point. For whereas the glory of the battle-standard and the scalp is undying, that of the Jívaro heads endures only to the end of the great Festival of Rejoicing with which they are honoured on the return of the war-party to their homes.

During the absence of the warriors their women have made ready vast quantities of *giamanchi*. This preparation contains just enough alcohol to inebriate when taken in enormous quantities, as the savages do on these occasions. Unlike civilized intoxicants its only action is stupefying. The tom-toms are brought out, and men and women throw themselves into the business of dancing and drinking themselves to sleep. The rhythmic beats of the drums resound through the woods for many a long hour. Only the soporific effect of the liquor suffices to bring the orgy to an end.

Afterwards the heads are shorn of their hair, which

is converted into permanent trophies in the form of belts to be worn round the loin-cloths of their distinguished owners in battle or at the feast. The possession of such a trophy singles a man out for special regard. But the heads themselves have now lost their value, as surely as pearls which have died. It is curious that the fanatical jealousy with which they are guarded up to the time of the festival should give place to that complete indifference which allows them to be thrown to the children as play-things and finally lost in river or swamp

NOTE: It has come to the author's attention that there is in Panama a man who makes a business of preparing and shrinking heads, and who has even shrunken two entire bodies, one of an adult, the other evidently of a child; the body of the latter only ten by twelve inches. These heads, human or otherwise, are much more skillfully prepared than the legitimate work of the Jívaros. The slit in the legitimate Jívaro head is drawn together with a very coarse fibre, while the work of this expert is so neatly done that the incision can hardly be noticed. The heads are those of white men, negroes, Chinamen and natives, probably selected from unclaimed hospital dead. In Europe the author has also run across these heads which evidently must have come from the same source. In Panama, where tourists have created a brisk demand for these uncouth curios, heads, either human or monkey, are made to order or sold for $25 each.

CHAPTER XXII

STRATEGY

A council—the fleet moves off—We abandon diplomacy—We proceed by raft—Ambusha provides a laugh—Poisonous snakes—Pongo playa—Jack escapes death—Fresh supplies—Ambusha retires.

It would clearly have been bad policy to remain for long within so short a distance of the infuriated Huambizas. Either we must push on up-stream, or go back on our tracks. It was an open question, with only one outstanding feature—we must move somewhere, and at once. There were various factors to be considered. First, it became perfectly clear that Tuhuimpui had gone as far as he had ever intended to go. He took it for granted that we would turn tail immediately, after the fashion of Jívaro warriors, and accompany his party down-stream as fast as paddle could take us. He had always insisted that there was gold in abundance in the Marañon above the Pongo Menseriche. That day he was more than ever convinced of the comparative desirability of his home-river. The Marañon in its sinuous course flows through some four hundred miles of country before entering the great cañon. Its course is broken by falls and rapids over the whole distance. It is thus not navigable except in the lower reaches by the lightest canoes, which could be packed round cataracts and falls. There are, of course, long stretches of open water at intervals where paddle and pole can be used.

Secondly, if we continued up-stream alone, we should have a hard fight, laden as we were with an equipment

which was really too heavy for five men to cope with.

Thirdly, the Huambizas were thoroughly aroused, and we should run the risk of surprise attack from the bank, obliged as we should be, in working up-stream, to keep along the shore to avoid the strong current in the middle of the rover.

Lastly, we were anxious to trade the Jívaros out of their trophies—relics of the "fight" in which we had taken part, gruesome enough to be sure, but none the less significant and interesting. After all, it was no fault of ours that their previous owners had been caught napping!

So we held a council and came to the conclusion that we would follow the crowd down-stream to their first camp, at any rate, where they would be sure to continue the curing of the heads and we should get a chance of putting the business through. Toward dusk, then, we all began to board our dugouts—the signal for the commencement of trouble. I have mentioned that we were by this time ourselves the object of many a greedy pair of eyes. Those battle-heated savages were in a nasty temper. They were becoming bolder every minute, approaching in groups of five or six in an attempt to borrow our rifles and not always remembering to leave their spears behind them even then. One who was too persistent in his desire to disarm Jack received the butt-end of his Winchester full in his chest, an incident that did not tend to smooth matters over. We were rapidly losing our self-control, much as we wanted to avoid another massacre. There was a lull in the trouble however, when Tuhuimpui came up to pow-wow, still insisting that he "thought it would be as well if each of us captained a Jívaro dugout, at intervals throughout the long column, to inspire his men with confidence. Our prestige was very great, our power greater. We could save them

from disaster, should the Huambizas give chase. We should be a tower of strength to them in the gathering darkness." All this was highly complimentary, but of course merely served to conceal the crafty designs of that smooth-tongued old scoundrel who coveted our heads and our outfit.

If we were to avoid a rupture of diplomatic relations we must walk carefully. With infinite patience, then, through a conversation lasting, perhaps, a quarter of an hour, I persuaded Tuhuimpui that the most we could do would be for four of us to go two and two, while the fifth took a third canoe. Scarcely veiling his disappointment but forced to give way before our determination not to be massacred singly, he went off at last, and gave the necessary orders. Had we been all separated, doubtless at a given signal, the crew of each of our canoes would have capsized their craft, themselves diving with their spears, and precipitating us and our Winchesters into the water, where the Jívaros are as much at home as on land, but where our arms would be at a great disadvantage. In a moment we should have been stuck like common *paichi*.

A moment later and the whole fleet was on the move. Jack and Ed. put off with the leading flotilla. Ambusha cannot be said to have embarked with any more zest than a Missouri mule being loaded for export. We decided that we didn't care much whether he showed up at the end of the day, for the fellow had by this time come out in his true colours. We at any rate gave him a fair chance of joining hands with the savages in an attempt to desert the expedition, for with the help of a little gentle persuasion (he was not one of those who care for the business end of a rifle) we put him on board a dugout which was stationed in the middle of

the column. Game and I brought up the rear with Tuhuimpui.

The grinning skulls of the victims of our raid stared a hideous last look at us from the strand, their naked eyeballs bulging, their dry tongues lolling in a mute farewell. Theirs would never be the good fortune to be buried; disgraced before their fellows they would lie gaping at the sun until the kites and buzzards picked the bones and the dry skulls were swept away by the rising waters to their last resting-place.

In an hour we had made a sand-bar where it was decided to stop for the night. Indeed, by the time my canoe arrived the fires were already blazing, the vanguard having had a few minutes start of us. With the same care as ever, we pitched our camp at a safe distance from that of our "allies." Restrained by our show of determination not to be fooled into taking a false step they left us in peace that night. We on our part held another council. Were we to turn back or not? To cut a long story short, for reasons that I have already discussed we considered it best to reach the Upper Santiago by way of the Morona. This meant, of course, that we must pass through the Pongo Menseriche once more. So we "turned in" with our minds made up, leaving Jack and Game to mount guard. The boldness of the Jívaros since their successful raid convinced us that but one thing was wanting to convert a great "victory" into an overwhelming triumph. A single watch would have been none too safe. All night long the savages sat around their fires, putting the finishing touches to the heads, chattering and gesticulating in the light of the flames.

Next morning we were away as usual with the sun. Once more Tuhuimpui tried to make me see the wisdom of adopting the formation he suggested. Once more

I staved him off. So the long line swung down river in the same order, an interval of perhaps a mile between the van and the main body, and the same between the main body and the rear-guard.

For an hour we floated along, nothing but the wash of the paddles to break the silence except the occasional squawk of a parrot. In the stem of my canoe sat Tuhuimpui steering. The three paddlers in the bow swayed to and fro with the ceaseless rhythm that knows no fatigue. Game and I amidships, seated back to back with our rifles across our knees, smoked in silence, never losing sight of the Indians for a moment. Tuhuimpui had received his orders—our dugout was on no account to move up from its place in the rear. We were taking no risks that morning.

Two shots from around the long curve down-stream in quick succession roused us from our reverie. In a flash I had swung my rifle to the right and fired full into Tuhuimpui's stomach. The chief wilted and slid into the bilge-water in a heap. I turned to see Game grappling with the nearest of the canoemen, his Winchester gripped at the muzzle by the savage. Before I had time to jump to his assistance, he too had fired and put an end to the scuffle. In a trice the remaining two slipped into the muddy torrent and disappeared. Meanwhile the canoes stretched out ahead, seeing what had happened, shot forward in a suddent effort to escape our fire. A few shots sent after them convinced them of their folly, and they took to the water, swimming and diving like a school of porpoises at sea. Once in the water they presented a very difficult target. Swimming below water, they would feel for the surface with one hand, bob up for an instant to take a breath, and disappear once more. And so they made their way ashore, abandoning everything in panic-stricken flight.

Jack and Ed. were safe, we knew, for from downstream came the sound of their firing, the heavy discharge of Jack's .450 followed by the sharper report of Morse's lighter weapon. Anxious to join forces with them, we left the now vacated flotilla of lighter canoes to drift along, and paddled ahead as hard as we could. The alarm had been given, and it was our first duty to see what had befallen our companions after making sure of our rear.

Foreseeing trouble, we had arranged on the night before that in case of a hostile move on the part of the savages, the signal should be two shots fired in rapid succession. It was agreed that they should not be fired without due cause, but that once the alarm was given, each of us would exterminate the Indians in his vicinity. There was to be no hesitation, for, much as we wished to avoid trouble, if trouble came we must meet it instantly. So when the signal shots were fired, we turned on the Jívaros like a flash, knowing that our friends were in great peril, if not already dead.

Turning a short bend five minutes later, we came upon Ambusha in mid-stream alone in a dugout. Enquiry showed that it was he who had given the alarm. His story was somewhat as follows:

"The Indians in my canoe turned in-shore without a word of warning," he said, "and landed, leaving me alone by the bank. I was sure they were up to some deviltry or other, so I pushed off, paddled out some distance and fired."

This was indeed a lame story! But as events turned out, Ambusha was that day our benefactor, for I am convinced that sooner or later what happened had to happen, and the chances are that we should have found ourselves in a much tighter corner. We left him to

round up the empty canoes while we pushed on to join Ed. and Jack.

We found them within a few minutes herding another bunch of dugouts toward a sand-bar, their occupants having long since fled for the forest. Glad indeed we were to see each other safe and sound. The climax had come and passed, and there we were in possession of a huge equipment. What was fated to happen had happened and there was nothing to be gained by giving it another thought. From those that had escaped we had nothing to fear, though they would probably never thank us for the gift of their lives.

That night our spirits rose, freed from the anxiety of the constant watching, which had been our only care for many a day. We donned Antipa loin-cloths, part of the spoil collected from the canoes and seizing spears, we put up as good an imitation of the Jívaro war-dance as we could command. The heads we smoked once more and stowed them away in empty lard-cans in the poison box—precious trophies which no white man had ever brought *from the fight* before.

My journal died a natural death on the day of the attack on the Huambizas. Had I ever had any idea of writing about my experiences at a later date, perhaps it might have survived even those strenuous days. But I had not, with the result that now I cannot vouch for the accuracy of the dates throughout the remainder of the expedition in search of the Inca gold. However, the outstanding incidents of the trip are indelibly impressed on my memory, and I have, too, a collection of odd notes and letters written to my family and friends to which I can refer.

During the next three weeks, then, we proceeded leisurely down the Santiago on a raft made of all the canoes which we had collected and bound together.

Hunting, prospecting, searching for rubber, pitching camp when and where the fancy took us, we revelled in the relaxation of those delightful days. Of gold we found a little but evidence of an abundance of couchau. Hunting was good, for the zone through which we were passing is a kind of No Man's Land between the Antipas and the Huambizas. Turtles were plentiful, and we found large quantities of eggs in all stages of incubation; those which contained fully formed live turtles proved even better eating than those not so far advanced. In a word, we passed a care-free pleasant life, whether it was aboard our craft or on shore, hunting the day's supper, or adding a gram or two to the gold-bottle.

Little by little we drew near to the Marañon. *Yacu-Mámam* was kind to us, for he kept the rains in the sky, and we who might have been by this time huddled shivering round the camp-fire many a day still sat snug under the thatched roof of our floating house, enjoying to the full the last week of the dry season. Quite oblivious of the fact that if we did not reach the Pongo before the rains set in we might never be able to navigate it that season, we drifted leisurely along without a care, living only for the day—our life, however, not unbroken by incident. Tragedy and comedy must be there wherever man is.

One day Ambusha provided us with a laugh such as we had not enjoyed for many a week. It was midday and the four of us were lolling round the canoes which were beached on the edge of a sand-bar some seventy-five yards from the edge of the forest into which Ambusha had gone off by himself. Suddenly with a yell he broke cover and came sprinting down toward the water. At first we could think of nothing but a war-party of Huambizas. In another second, however, we spotted the cause of his terror. Not two yards behind

him, skimming over the ground at the same pace as its quarry, came a black snake. With a howl Ambusha dashed into the water, just in time to escape the venomous fangs. The snake halted. At that moment, I seized my rifle and shot its head off.

Now, there have been many tales told about snakes chasing men, but my varied experiences of all kinds of reptiles in North, Central and South America convince me that, at any rate on the American Continent, it is a very rare event. Never at any other time have I seen this happen myself. My companions have been bitten and I have been bitten also, but never chased. The chasing has always been done by me. But that day, at any rate, there was no doubt about the intentions of Ambusha's assailant. Barely three feet long, as thick as a man's thumb, its disproportionately large diamond-shaped head poised on its slender neck (the trade-mark of the venomous snakes) it attacked and chased with surprising temerity so large an antagonist as a man, evidently confident of its power to kill.

Examination showed it to be jet-black, except for the usual light underside. Its head was armed with the customary pair of fangs, about three-quarters of an inch long, and embedded in the membrane of the roof of the mouth were three other pairs, each one a little less developed than the last. Should they lose their fangs, these snakes have the necessary equipment to replace them. Perhaps they cast them periodically, as they do their skins. This specimen was the largest poisonous snake I ever saw in the Amazon basin.

Snakes are known to the Incas as *machacuis*. The tropical swamps of the whole territory of which I write are so favourable to reptilian growth that it is surprising how few *poisonous* snakes are to be found there. During my six years in the Amazon bush, I did not see more

than half a dozen venomous snakes in all, comprising three species, two of them only some fifteen inches long. However small, they kill the native Indians. They succumb to their bite perhaps as much from the psychological effect as from the actual venom. Jack and I were both bitten by the snake which always proves fatal to the Jívaros who neither know of, nor attempt to discover any remedy against their bite. They are hopeless fatalists with regard to this particular catastrophe. They merely say "I have been bitten," and lie down to die.

Doubtless there are other species which I have never seen, but at any rate the point which I wish to make, the fact of their comparative rarity, is indisputable. One would expect to find those vast untrodden swamps teeming with every conceivable variety of reptile.

When we reached the point at which we had been overtaken by the war-party, we got to work with pick and shovel and unearthed the cache of stores we had left behind, a hundred-pound glass container full of rice, and a case of three thousand rounds of ammunition. Everything was in good order, for we had been fortunate enough to finish the caching before the arrival of our "allies."

After closing my journal I attempted to keep track of the days by cutting notches in a paddle. The paddle was lost, however, some time during the month of November, but it must have been towards the end of that month when we arrived at the mouth of the Santiago and once more faced the great cañon. The Marañon, had not yet swollen so we made preparations for the passage confident of getting through. The great unwieldy raft on which we had floated down the Santiago was too big to manoeuvre in the difficult waters of the Pongo. We accordingly divided it into three parts, doing away with the roof altogether. We stopped on the sand-bar at

the junction of the two rivers (the same on which we had met the Antipas who had come to trade with us) where the operation was completed in a couple of days. There was, by the way, no trace of any of the piles of foodstuffs we had left there when we had started up the Santiago. So as to be able to make a raft for the future passage of the Pongo, when we should return from the headwaters of the Santiago which we expected to reach by way of the Morona, we cached seven or eight dugouts at a point on the right bank a few hundred yards from that place.

It was during that passage of the cañon that we stayed for a week on the beach to which I have referred previously as Pongo Playa, the only spot in the whole length of the gorge where a landing can be made and a camp pitched, a strikingly beautiful place. It is the shape of a wedge of cheese, some thirty yards broad at the water's edge and of the same depth. At its apex it narrows to a crack in the precipitous cliffs, choked with tropical verdure to such an extent that it does not invite one to explore it. Such adventures do not hold out many attractions to those who know the profusion of insect life with which the close country is infested. The height of the cliffs I have discussed already. I cannot allow of their being higher than a thousand feet. Their bare, smooth, grey face forms an impressive background to the snug little beach at their feet. Protected by an irregular row of boulders from the force of the rushing waters of the Marañon, the triangle of smooth sand with a single cypress tree growing almost in the centre on which are clustered orchids and moss, vines and creepers, forms an inviting haven for the traveller who may venture there. As a camping ground it is ideal. Protected from the wind, shaded from the burning sun, it is a welcome resting-place after battling with the currents of its only

approach. Here, then, we rested, where doubtless we should have found no dry land a month later. We landed all our kit, opened it up and dried it out, leaving the "war-bags" and boxes strewn about. For food we still had plenty of rice, beans and smoked meat, sugar, rum, and turtles' eggs packed in salt.

One night when Ed. was on guard duty he had an attack of nerves. Calling up Jack he pointed out in tense whispers objects near the water's edge. A hurried discussion took place.

"A moment ago they were over there," breathed Ed., "and now look at them—crawling up toward the camp."

He fired. Seeing that there was no result, I, who had been roused by the shot, suggested that we should hold our fire and take a look. We found a harmless row of kit-bags and cases. Next morning I made a closer examination, anxious to see whether he had made a hit. It happened that he picked out the one package in which were stowed all the good clothes we had for our return to civilization, the bullet having made sixteen holes in my best pair of trousers, which had been carefully folded and sealed in rubber, and finally come to rest in Jack's only pair of shoes.

The next night Jack startled the whole camp by springing out of his blanket with a shout. We were all sleeping in the open without mosquito nets. A moment later, while he was collecting his wits and wondering what had startled him, an enormous orchid, roots and all, crashed on to the very spot from which he had escaped. It must have weighed at least a hundred pounds and it fell twenty yards from the cypress tree. His escape was miraculous.

We were very sorry to leave that little *playa* where so many pleasant hours had been spent throwing drift into the whirlpool and betting on the number of times it would go around before being sucked into the vortex.

But we felt that we must push on to the Morona before the winter floods set in.

Arrived at Borja, we landed to find out what crops were waiting us of those we had planted four months ago. The corn, we found, had ripened and dried up and was serviceable only for parching. The *yuca,* however, was young and mealy, and the crop plentiful. Despite our anxiety to push on, a supply of so much fresh vegetable food and smoked game for our new venture (for in Borja we could collect any amount) was too vital a necessity to be overlooked. So we stayed long enough to re-furnish ourselves with a store of good food, which we judged would last for four months, digging up our *yuca,* shooting and smoking *huanganas,* and making meat-extract out of monkeys. The latter was a great success. By boiling the whole animal, after skinning and cleaning it a thick hash of bones, meat and gravy was produced. This we strained through Jack's basket-work hat until nothing was left but the liquor, to which was added red pepper and salt; the whole was then boiled down again to the consistency of beef-extract, and stored in empty butter tins. It kept indefinitely and proved an excellent basis for soup, being one of the best ways we ever discovered for keeping concentrated food.

One of the greatest nuisances we had to put up with was the abundance of common "blue bottles" or blow-flies. We were quite unable to air our blankets, as we should have liked to do, for within an hour of putting them out they would have been white with eggs, as we proved one morning by a practical demonstration. It is the same with freshly killed meat in that country. If not immediately hung in the smoke it is ruined. There were no mosquitos nor sand-flies at Borja. The greatest pest was the ant. Innumerable species abounded. Any scraps left about would be sure to attract great

numbers. But on the whole we passed a pleasant enough time, the days succeeding each other quickly.

The day before we left we had a little joke at Jack's expense, as if to send us off in good spirits. His great physical failing was big feet. He could mop up more thorns and disturb more creeping things at a single stride than any two of the rest of us. That afternoon he and I were out for a last look round, when we struck a *huangana* trail. We followed the herd up for some distance, moving about at random, until of a sudden Jack cried out to me, "Look over there! We are getting warm! Do you see those tracks in the mud where they've been lying down"?

We went over to investigate the spot he had pointed to, and found his own footprints. We had passed that way a few minutes before. (Jack's hat, by the way, had been given him by an Indian admirer of his in Barranca as we passed through, who declared that in token of admiration of the largest pair of feet he had ever seen he would like to give him a present.)

When we left Borja it had been decided, much to the relief of all concerned, that Ambusha would leave us. We gave him all the canoes for which we had no use, keeping only the *Exploradora* for our trip up the Morona, and caching three or four Jívaro canoes near the mouth of that river for future use.

We arrived off the mouth of the Morona about Christmas time, having spent a night on our old haunt on Mitaya Isla just to keep the mosquitoes' spirits up. Here Ambusha left us, not any more sorry to go than we were to see the last of him. It would take him three or four days to make Baranca, where he would be able to dispose of some of the canoes. He would then push on to Iquitos, selling the remainder off at the riverside posts of which there were many.

And so it came about that with our numbers dwindled to four we turned the great thick nose of the *Exploradora* up-stream once more, this time to breast the waters of the Morona to find fresh adventure—and perhaps the ancient source of the Inca gold.

CHAPTER XXIII

THE MORONA

A swampy maze—The Amazon ants—An invincible army—Jaguars—A portage—Macas—A traveled man—Spate—A rough passage.

For about ninety days we paddled and poled. The first sixty were spent on the Morona, at the end of which we arrived at the point where the parent streams of the Morona, the Cangaimi and the Cusulina join their waters. The Cangaimi, as is seen from the colour of the water, drains the low lands to the east of the foot-hills of the Andes, while the Cusulina rises in the hills themselves, and its waters are clear, having flowed through a sand and gravel country, as against the clay and silt over which the former makes its way.

The River Morona, from its eastern watershed, itself drains low lying country, a great portion of which is inundated off and on for half the year. The floods, however, do not take place with the clockwork regularity of the Amazon itself, and its larger tributaries. Whereas in regions through which the latter flow the difference of level between the wet and dry seasons is from twenty-five to fifty feet, according to locality, and the seasons are strictly divided, the Morona overflows its banks intermittently throughout the first six months of each year. Its depths varies very rapidly and strictly in accordance with the local rainfall, a fact which is evident from the lowness of the banks, the appearance of the flora, and the sluggish swampy streams which feed the main river from the east, and drain the vast morasses which extend over many hundreds of square miles. As a consequence, the

ferns and the palms which flourish in the wet play a more prominent part in the composition of the forests which line the banks of the Morona than those which are to be found on the Santiago. The giants which abound in the non-inundated sections of the Amazon basin are here rarely to be seen, the general level of the roof of the forest being not higher than a hundred and fifty feet. The lower Morona landscape is not relieved by any hills, though occasionally it flows between very high banks, veritable minature cañons which protect the country round from inundation.

Emerging from the last one of these "canalizadas" (canals), about two weeks' run from the mouth of the river, one sees for the first time the low range of verdure-clad mountains, forming the divide between the Morona and the Santiago.

This interesting range of mountains is in reality a continuation of a bifurcation of the main range of the Andean cordillera, with Sangay volcano at the apex of the fork and locally known as the Logronia Mountains. It sweeps to the east and south, enclosing the watersheds of the Santiago and Marañon rivers, which pierce it near their junction, through the Pongo Menseriche and again links up with the main Andean ranges in the mountains between Chachapoyas and Moyabamba; making it undoubtedly the longest "Nudo" in the Andean system.

It has no local name nor have I ever seen it distinctly designated on a map or described or mentioned in an atlas. I have therefore presumed to baptize it "Rouse's Range," in memory of Jack, the only member of the Expedition who perished in the Amazon.

This range was our constant neighbor on the west, as it always was in the Santiago on the east; a glad relief to the same eternal maze of pathless forest stretching away to the Pastaza and beyond. Farther on, the

smoking volcano, "Sangay," was at times visible and the river abounded with the floating lava (pumice stone) overflowing from its simmering and active crater and carried along by its mountain torrents to the headwaters of the Cusulina which drains its base.

Game is as plentiful throughout this zone as in any other of the whole basin. Birds similar to our pheasant, quail, and partridge abound, as well as the inevitable *paujil* and turkey (guan), the parrot and *yungururu*. The last-named is seldom seen, but its peculiar musical call is frequently heard. Here, too, the *trompitero* (a Spanish name adopted by the Incas) is to be found in large numbers. It is a strictly gregarious bird, and when stalked by the hunter it utters its deep, loud, vibrating guffaw in a manner calculated to give the buck-fever to the uninitiated. It has long scaly bright-green legs similar to those of a stork, a head, neck and body like a chicken, and mottled grey plumage. It is, of course, a running bird and nests on the ground. In short, the avi-fauna of the Amazon are well represented in this zone. In general they cannot be classed as fine songsters. Rather are they notable for their unmusical voices and striking plumage. The stateliest of all are the storks and herons. I have already spoken of the species of the former which stands six feet high. A row of these birds standing on a log seen from a distance of four or five hundred yards, the nearest to which one can approach, looks like a gang of sailors in their "whites." It has been said that there is a stork which measures eight feet from head to foot, with a spread of wing of eight feet six inches, but it has never been my fortune to see one.

Were we to leave the birds of the Morona without mentioning the *flautero* (flautist—*Spanish,* adopted also by the Incas) our short review of them would be very incomplete for, in a land where song is a rarity, this

tiny wren-like bird chants a sweet soft tune like the notes of the instrument from which he takes his name.

Among the most graceful of the water-fowl of the world is the flamingo, which is to be seen on every bend of the Morona, strutting gracefully in the shallows of the semi-stagnant arms of the river which drains the marshes.

Through the great swampy maze we struggled on. The long succession of days passed without much worth recording befalling us. They were marked for the most part by good shooting or bad, hard paddling or easy, cold rain or hot sun. At times, as we neared the upper reaches of the Morona, we passed through periods of high water and consequently difficult canoeing. At such times, the islets and sand-bars being flooded, we were compelled to pitch our camp for the night on the mainland.

Here we had no savages to guard against, but we were overrun by a worse enemy, ants. A couple of stout volumes could be written on the subject of the Amazon ants, but as this record is not designed to be a treatise on natural history, I do not propose to give the enormous amount of detail which would be required to convey an adequate impression of the great number of varieties of this insect to be found in the forests of which I write.

I must preface my few remarks by mentioning that one cannot sit down in the woods, nor even remain standing in one place for any length of time, without being found out by a score of species, ranging from the almost invisible red dwarfs to the giant Alligator Ant, the biggest ant in the world, which measures an inch and a quarter in length.

Of all the ants in the Amazon woods, the black ants are the most troublesome, the *ituris* the most noxious, and the soldier ants the most formidable. The first-named swarm everywhere. In the middle of the night

one is awakened to find the blankets, and indeed the whole camp, alive with them. There is nothing to do but beat a hasty retreat to the canoes, the only place that is free from them. When morning comes, one makes a small clearing through which the sun's cleansing rays can reach the ground. With a pole one begins to move one's blankets and the rest of the kit, until everything is spread about in the small patch of sunlight in which no ants will stay, a habit common to most other creatures of the damp, gloomy woods. Even the canoes, however, are not quite safe from this pest, for if the mooring rope is not passed under water, they will often board and take possession of the craft. If once they are established, the best way of ejecting them is to tie up the dugouts in the sun, near enough to the bank to allow of sticks to be laid from their sides to the land to serve as gangways. Across these bridges the ants will come streaming back to shore as soon as they feel the heat of their enemy. To be discovered by one of their number is to be discovered by millions, for they pass the word immediately. I have proved this many a time by experiments with a drop of molasses or a lump of sugar.

The *iuturis* are positively dangerous. A single sting from the tail of one of these insects will suffice to bring on a fever which may last two or three days. Fortunately, as far as my experience goes, these particular marauders are only active by day. They are to be seen everywhere, in the trees, where they nest, or on the ground. It was one of these *iuturis,* as I have already mentioned, which boarded our canoe by means of the mooring rope which was passed under water as usual. Their sting is exceedingly painful. It raises no lump and leaves no mark, but a whole limb is affected within a few minutes and the poison thus injected is so potent that it causes very acute pain for a matter of two

hours or more. One cannot endure it sitting still. The fact that the *iuturis* are so numerous in all parts of the Amazon basin, coupled with their "mean disposition," makes them the greatest of all the pests to which the traveller who would leave the natural highways, the rivers, is exposed.

Most interesting of all the ant family is the carnivorous soldier-ant. Woe betide the wounded animal or the sick man, should the soldier-ant discover him!

All foraging ants are of three types or sexes—males, females, and workers. The workers of this particular species are again divided into two quite distinct types —the common soldier and the officer. The latter is just half an inch long, the former varying from a fifth to a third of an inch. Apart from the difference in size, the two classes are identical. The body and legs of this ant are red, and covered with a harder shell than the ordinary "pack ant," which he resembles in colour and size. The head is perfectly round, ivory coloured, smooth, hard and shiny. It is out of all proportion to the body, being in the case of the officer the size of a green pea. Projecting from this ivory dome is a pair of formidable pincer-like cutters, red like the insect's limbs. With these instruments the ant seizes and tears its prey. If one should fasten itself to your leg and you attempt to pull him off, he will leave his pincers in your flesh rather than loose his hold.

The soldier-ant well deserves his name, for he is the most courageous and the most disciplined of all living creatures. He moves through the woods in vast armies, whose power of destruction is incredibly great. No obstacle will stop the steady forward movement of the solid columns which march about twenty abreast with about five files to the foot, the officers marching alongside at a constant distance of four or five inches. Thus

the formation in which these insects move resembles that of a battalion on the march. Frequently I have run across such columns in the woods, and have at times followed them for *two or three miles* in an attempt to find the end of the line, or whence it came. Never have I succeeded. They appear to have no nests, and to be constantly on the move. The number of ants composing such columns can easily be estimated; there must be well over half a million to the mile.

Grubs, worms, caterpillars, toads, frogs, lizards, and even rats which get in the way of a column of soldier-ants meet their fate as surely as if crushed under a "tank." One of the larger animals, if wounded and unable to move, will leave no trace but a pile of clean white bones, a transformation which takes but twenty-four hours.

I have said that they are the bravest of the brave. When a column is on the march, nothing will stay their progress; they will even throw themselves on to a lighted brand and extinguish the flame with their own carcasses that those which follow on may walk over them. Even though the heat be sufficient to warn them of their danger, these insects will never turn aside. . . . They are instilled with a more invincible spirit of battle than any soldiers in the world. I have seen them hurl themselves at a lighted cigar which lay in their way and, the leading ants biting right into the lighted end, tear it to bits in half a minute. A dozen ants had to die that the fire might be put out, but there were a million more behind.

In the rubber-camps an occasional visit from these insects was ever welcomed. It was the surest way of ridding the premises of all kinds of vermin, mice, worms, crickets and all the other creeping, running, and hopping thing with which such places are overrun. Not a

sign of life would be left after the column had passed by, for when they strike a house, a corpse, or any other field for investigation, the head of the column stops, and the oncoming hordes spread out and take possession of the object they have found. As soon as each one has bitten off his full load of meat, he goes off again with his fellows in the same marching order carrying his booty between his pincers. How the tail end of a long column finds enough food to subsist on is a mystery to me; perhaps some system of participation is recognized among them, and on arrival at a common feeding-ground or nest, the food that has been collected by the whole "army" is stacked and becomes common property. Such a theory is by no means fantastic, as has been demonstrated by the observations of many naturalists who have borne witness to the high order of intelligence with which other species of ants are gifted, an intelligence which enables them to raise a kind of fungus for food—a practice worthy of the name agriculture—to keep servants and *masseurs,* and even to hold other ants in captivity and use them as cattle, inducing them to exude a nourishing liquid by stroking them with their antennae.

At the end of sixty days' paddling then, during which we had recovered approximately three hundred miles, we passed into the Cusulina, en route for Macas. Here we met a swifter current still, but were able to use the poles by reason of the shallowness of the river. Jaguars were numerous and were seen swimming across the river. In the shallows, they splashed about after fish, a favourite food of theirs. In contrast to most other members of the same family, water has no terrors for these cats. Their skins are worthless, commercially speaking, for a close examination shows them to be very thin-haired.

After some twenty-five or thirty days on the Cusulina —we had by that time completely lost track of the days —we arrived at a portage trail, which leads from the right bank of that river on to the Santiago. We had passed right through a very big unexplored zone and reached the outer fringe of civilization on the far side. We had seen very little of the country through which the Morona and its parent streams flow, for we had not had the time nor the wish to penetrate far from the main waterway with the prospect of wading through endless swamps. Such a procedure is, indeed, extremely dangerous, for, on account of the rapid rise and fall of the water in obedience to the rainfall, heavy canoes may be stuck, high and dry for weeks, a long distance from the main channel. The only way then is to wait for high water again or build a corduroy road and cover it with the slippery bark of a species of the balsa wood which abounds and is used for this purpose, and slide the canoe back to the stream.

The sole representative of civilization to be found where the trail left the river was an old Ecuadorian half-breed who enjoyed luxurious ease dressed only in a pair of cotton underdrawers, and surrounded by his immediate family. He had a well-kept *chacra,* which gave him coffee, cocoa-beans, plantains, *yuca,* and all the other necessities such simple people know. He spent his life fishing and shooting—a life free from the tax collector and the game warden, or indeed any man-made law. For his axes and machetes which came from the towns of the Andes by means of the Jesuit priests of Macas he traded the gold-dust which he panned out of the river which ran past his door, with an occasional deal in coffee, vanilla, or any other natural product of the soil of which he might have too much for his needs. He kept tame *paujils, trompiteros,* and parrots and a few

chickens. He had collected round him the implements and accessories with which both Christians and Jívaros could furnish him. As far as I could see he craved nothing which he did not have, and so lived in perfect contentment. His case was only one of many hundreds of such isolated posts on the fringe of the Jívaro country where life presented no difficulties. How hard we strive to make a living in a great city, while there in the woods Nature hands it to a man on a silver platter!

We struck a bargain with the old man by which he was to find the labour to transport our stores across country to the point of embarkation on the Santiago, a distance of about fifteen or twenty miles, in exchange for the *Exploradora*. He provided us with a gang of the lightest-fingered gentlemen I have met, an accomplishment common to all Amazon Indians but only developed to such a high state of proficiency among a few of the half-civilized individuals whose habits are influenced by their Christian brothers, both clerical and lay, with whom they come in contact in the outlying posts. The *cargadores* had to make two trips, but we supervised the transport of all the valuable portion of our possessions in person.

The collection of thatch huts known as Macas is an ancient mission station and the frontier post of Governmental authority not very far from the nearest loop of the Santiago. When we passed through, the population was composed of only one priest—the rest being absent on errands of mercy, administering the sacraments of the Church, and collecting for same—and a few renegade Jívaros who had been chased out of their tribes for some offence committed against the strict moral code of their people which they found they could repeat with impunity in their new home. The latter

still wore their hair long, but had put aside their loincloths in favour of overalls.

The priest, who was lord and master of Macas, was not too pleased to see us. Finding, however, that we had not come to stay but wished to embark on the Santiago his manner changed to one of extreme affability. There was nothing he would not do to help us on our way. The influence which he exerted on our behalf had a definite result in the shape of the immediate arrival of our stores in the settlement, their speedy transportation to the Santiago, and our being able to purchase a canoe with the utmost ease. He assured us that the climate was "poisonous," that if we stayed there we should soon contract smallpox and berri-berri, and that we had struck the worst season of the year as well. In fact, during the short twenty-four hours that we enjoyed his hospitality we were treated to a very complete picture of the horrors of life in Macas. Possibly that may have had some connection with the pots full of gold which rumour, in the mouths of his native servants, had it were buried under the floor of his house. In any event, certain it is that our presence for a longer period was not desired. Doubtless we might have diverted some of the golden stream from our host's coffers into our own. There was an amusing side to his conversation, too. He displayed an ignorance of geography only equalled by that of his Indian companions. His reading seemed to have begun and ended with the Catechism. However, to display his knowledge of a world which must have been for him a complete mystery, upon learning that most of us were Americans he remarked with conscious pride in his grasp of mundane affairs:

"So George Washington is your president, eh?"

I am proud to say that I answered him without a smile that Washington was dead. I hoped that this

would end the conversation on the subject. But he was not to be so easily suppressed. Who, then, *was* the president?

At this point we all began to suffer from an acute attack of internal combustion, which found an outlet within a few seconds. The priest, I must say, took his disillusionment in good part.

Up to that time we had considered ourselves to be fairly well-travelled men. Between us we had covered the whole of the Western Hemisphere, from Puntarenas to Dawson City. But after we had listened to the story of a part of the travels of our host, we were compelled to tender him the palm. Let me tell it as it was told to us.

"I was living in a monastery in Quito, completing my studies so that I might become a *cura*. One day, I was taken ill and died. My death was a gift from God to enable me to learn the secrets of the souls of the damned. My body was sealed in the catacomb of the monastery for sixteen days, while I undertook a journey through Hell. There I beheld the torments of those of my friends and brother-friars who had sinned in this world and were suffering eternal torments. (Here he improved at great length, on the *Divine Comedy*.) When I awoke in my earthly body, I found myself entombed, but by the use of my feet I fought my way to liberty and started life afresh, steadfastly determined to lead a righteous life."

"Steadfastly determined to lead a righteous life!" The words have rung in my ears ever since.

Talking with the Indians about the prospect of finding gold in the Santiago, we elucidated the fact that there was plenty of the precious metal to be found near Macas, but the sample that we saw showed it to be light and flaky, indicating that it had travelled some distance.

Their method of working placer gold is primitive. They use monkey skins stretched on a hoop of *bejuco* in place of a gold-pan.

Thus the heavy gold which we had found must have come into the Santiago from some of its western tributaries. We decided that it was not worth while going up the Santiago as, although with more modern equipment (cradles and sluice-boxes) we might have panned out considerable quantities, we preferred to go downstream and try for the coarser metal. The going would have been very bad above Macas, as it would have meant climbing the foothills of the Andes, and leaving most of our stores behind. The indications given us by the Indians, however, were of little or no value, for we knew from personal experience that they were content to scrape up the surface gravel in the river-beds with their naked hands, instead of working down to bed-rock.

Thus it happened that a few days after our arrival in Macas, we shipped our equipment in the new canoe on the Santiago, accompanied by a young Indian boy, who had been left in our charge by the missionary priest, with an injunction to find him some chance of learning a trade in "one of the big cities on the banks of the Amazon such as Pennsylvania, London, Paris or California"! (His idea of geography was typical of all the ranchers and *caucheros,* however wealthy, in the Amazon country. Ownership of a fleet of river-steamers had no connection with education.) The *chamaco* (boy) acted as servant until we arrived at Barranca, where we handed him over to Don Juan Ramirez.

As things turned out, owing to the great amount of water in the rivers at that time, it being the height of the rainy season, we had no opportunity on that trip of carrying out regular prospecting. All we could do was to locate and mark down the mouths of the creeks and

rivers in the vicinity of the placer deposit which we had found on the journey up-stream five months before. The whole country seemed to have been transformed. None of the familiar spots where we had camped and panned out gravel were recognizable. Indeed, most of them were under twenty feet of water. We never slept once on the sand. Even in the woods it was hard enough to find dry ground as we drew nearer to the Marañon. One of us had to be on guard always to watch the canoe, the river frequently rising and falling ten feet in a night. As I learned to my cost on the Yasuní, strange are the vagaries of the Amazon rivers. Even in summer, when camping on the sand-bars precautions must be taken. A drop of two feet in the level of the water may leave your dugout high and dry a hundred yards or so from the water's edge, unless you have taken the trouble to moor it to two or three poles fixed firmly in the sand as far out toward mid-stream as you can wade.

All this time we were living in a constant drenching downpour, sometimes light, sometimes heavy, but always there. A grey sky hid the glorious sun, the crystal water had given place to a muddy torrent, and where before we had shunned the mid-day heat, now we paddled to keep the blood flowing in our streaming bodies. We lived for the most part during the day in cotton underdrawers keeping a set of woolens in our "war-bags" for use at night after we had put the tent up. The mean temperature was about 80° Fahrenheit, but the rain was some degrees colder. However, it was better to be naked than clothed, so long as we were on the move. At two or three o'clock in the afternoon we would commence to look for a camping ground. Then, when a clearing had been made and the tent pitched, we started out to collect *dry* wood. The only way was to scale the trunk of a dead tree, or knock off some of its limbs.

Such limbs were the only fuel to be found, for once fallen to the ground they rot and become water-soaked.

So rapid was our progress that we arrived near the Pongo Menseriche within a fortnight of leaving Macas. Fifty miles a day needed no great effort. The last night before we emerged into the Marañon was spent in the canoe itself, no place for a camp having been found. At the junction of the two rivers we fished up the seven or eight dugouts which had belonged to the ill-fated Jívaros under Tuhuimpui. We had concealed them in a small inlet secure from the floods. We made a raft of the six best canoes, strengthened and protected by *balsa* logs and strapped together with *bejuco* strands. The purpose of this unwieldy but unsinkable craft was to carry us through the great canon in which the water would be at a higher level than when we had attempted the passage on previous occasions. Even so, we had to wait a few days for a propitious moment, when the water might be slower and on the fall. There is a considerable difference between the swiftness of the current when the water is on the rise and when it is on the fall, although the level may be the same in both cases.

At a point on the right bank of the Marañon within sight of the mouth of the Santiago, we built a permanent camp, erecting a good dry cook-house, a large storehouse for our kit, and a third shack for living-quarters.

During the eight or ten days of waiting, we spent our time hunting and playing cards, enjoying the luxury of being dry and of being able to sit down without striking a puddle. We were, however, all keen to try the Pongo as soon as an opportunity presented itself. On a day when it seemed to be raining harder than ever the water fell away. The rain had evidently eased up higher up-stream. There was really not much to be feared on that raft of ours.

That was the roughest passage of the cañon that I ever made. We went through from end to end as if in one headlong dive, for there is no stopping in the Pongo Menseriche, once you have started. The outer canoes of the raft were half-filled with water by the time we were nearing the great whirlpool. At the moment when we were actually sweeping round the edge of the basin, I, who was in the stern of the near-side canoe, was hanging out in mid-air over the vortex, shouting to the others to "paddle like the devil, or we should fall into the hole." We managed to manoeuvre the craft by paddling and fending off the rocks with poles until she swung clear. The rest was easy. We shot through the eastern gate into the big eddy facing it, and landed again at Borja.

We stayed the night to get an early morning start, as we were very uncertain of finding a resting-place between there and Barranca, which we hoped to be able to make in one day's run. Next day we started off at dawn, and completed our program, covering about ten miles an hour for twelve hours by keeping in the swift current and paddling hard.

Don Juan Ramirez was in residence at Barranca, having returned in the *Onza* with all his Indians from the rubber forests, from whence they had been driven by the annual floods.

It was the middle of April, 1900, when we arrived. We intended (if we can be said to have intended anything in those days) to carry on down-stream at least as far as Iquitos.

But Don Juan changed our plans.

CHAPTER XXIV

THE CROWNING FOLLY

A fresh start—I carry on alone—A bag of gold—Demoralization—A forest romance—Potatoes—A chapter of accidents—A monkey's indiscretion—A mute farewell.

ONE would have imagined that I was ready to go home by that time. But such was not the case. The spirit of the wilds had taken possession of me. No sooner had I reached Barranca, where a taste of civilization was to be had, than I was completely bowled over by the first wild scheme that presented itself. Perhaps if Don Juan José Ramírez had not been at home, I should have a very different tale to tell. But he was. And this is what he proposed.

There was supposed to be a tribe of Indians called Zaparos, he said, somewhere up the River Sicuanga, a tributary of the Morona, some twenty days up from the mouth. Furthermore, a fortune awaited the man who could find them and get them to work rubber (the same old story!). He was willing to finance the business if I would do the hard work.

I fell in with his scheme without a moment's hesitation. The next thing was to find someone to go with me.

Jack Rouse and Game had gone down-stream without stopping at Barranca with the avowed intention of going down to Manaos, where they could pick up something which would take them out of the country. That was the last I ever saw of my old friend Jack. He had been with me for four years, through bad times and good, and it was hard work parting from him, for it was more

than likely that I should never see him again. Men like Jack Rouse have no club address to hand you when they say "Good-bye."

So I was left alone with Morse, and it was perforce to him that I turned with my suggestion that he should accompany me on my new venture. He consented but with the reservation that after we had reached the upper waters of the Sicuanga and established a camp, he would leave me there, and return to Iquitos, dropping at Barranca the Indians whom we should take with us as canoemen. He promised, however, to come up-river again to Barranca in six months and meet me there to see what luck I had had.

My mind was made up, and I was not to be deterred by the prospect of being left alone with Supaitranca, the Indian boy whom I had picked up to act as servant a day or two before. So Ramírez fitted us out with provisions, and we set off within three weeks of our arrival. The journey went well. Everybody had a good time, reminiscent of the best days of the Gold Expedition. In schedule time we made the mouth of the Sicuanga and turned up northeast. That river is very similar to the Yasuní, though its average breadth is only about half that of the latter. Its water is slow-moving and dark, indicating that it drains swampy country. We never saw a sign of human life all the way up. For the last few days we did nothing but drag the canoes over or under logs. It was, of course, the dry season.

In a few days, after the Indians had made a good clearing and hut, in accordance with plan Morse took them off and left me with Supaitranca. The camp was about thirty days' canoeing up the Sicuanga at the navigation limit.

I spent three or four months wandering about those

swampy forests up there, looking for the lost tribe of Indians, who were supposed to be somewhere in the locality. First I would strike out twenty or thirty miles in one direction, then as many in another, and so on, until I had made hundreds of miles of trails radiating in every direction from camp, and covering some three hundred square miles—a mere speck in that vast, trackless region. Never a sign of human life did I find, and very little rubber. The country was even more desolate than the Yasuní. There might not have been another man on earth except Supaitranca.

And then Supaitranca died. He contracted some sort of fever and, as the Indians of the Upper Amazon so often do, resigned himself to death at once. He lay down and in two days had gone.

I had no living thing to keep me company. I should have been glad of a parrot, or even a tame *paujil*. It was the loneliest corner of the world I have ever seen. I think, perhaps, that no lonelier place exists except the polar regions. When life became unbearable in camp, I tramped off for three and four days and sometimes a week, into the forest beyond the zone of the trails I had marked, to see whether I could not find some hilly country, or in fact anything to break the ghastly monotony of the never-ending swamps. I packed a sack of rice, a pot for cooking, my machete, a few matches, a dry shirt, and my rifle. At night I slept on some patch of rising ground or, when the swamps cut me off, in a tree. There, on account of the very swamps themselves, the trees which grow out of the water are free from noxious insects. I used to make a rough platform out of branches stretched across two limbs, and tied with *bejucos*. I lived, like an animal, from day to day, often hard put to it to find enough food.

In this way, I spent three more months without finding one single trace of man to spur me on to further efforts, before the futility of that, my crowning folly, dawned on me at last. The thing was absurd. Even if I found any Indians, people who had no more self-respect than to live in a labyrinth of swamps would not be likely to prove of any more service than those who lived on the Yasuní had been. And my stores had given out. So I decided to leave that abominable place and next day set to work to chop out a barrel-palm, for Morse had taken the only canoe we had. For food I took with me a smoked hog's leg, part of an animal I brought down with my rifle. To make the canoe ride the waters of the swollen Morona (once more the wet season had come round) I placed the palm in a cradle of *balsa* logs. And it was well I did so, for the flood in the Morona and Marañon was the biggest I ever saw.

After a week or ten days of floating down-stream on high water, I made Barranca, much to my relief. I only landed once from the mouth of the Sicuanga onwards, although I must have looked for dry land half a dozen times. The country was one vast swamp.

I had not been in Barranca more than a few days when Morse arrived with a surprise packet and another "sure thing"° Now I was in no frame of mind for being talked into some new madness. I had already been four years on the way to New York, and began to be afraid of becoming web-footed if I lived much longer in those swamps. But Morse came along with such a glowing account of the possibilities of a cattle and cedar business between the Upper Cangaimi and Iquitos that when he finished up by producing a bag of English gold which an Iquitos merchant had advanced him for the venture, I fell once more. The plan was to penetrate into Ecuador by way of the River Cangaimi, near whose

banks there were reputed to exist cattle ranches. There we were to buy up stock (which would cost practically nothing) to make large rafts of cedar logs, and to float the cattle down to Iquitos where both wood and beasts would sell for a big figure. Concerning the cedar, there could be no doubt of the soundness of the scheme, for it already had a high market value for building purposes; as for the cattle I thought it was a safe speculation, for there was no fresh meat in Iquitos except turtles (and those only during the four-month season).

So it came about that we set off once more—confident of success as ever—with a Colombian adventurer to complete our number. Morse had run across this man on his way up from Iquitos. His main qualification for the work was that he claimed to have lived for some time in the very district which was to be our goal. We were considerably fortified by his glowing account of the abundance and cheapness of cattle on the Cangaimi in the small towns which bordered the Jívaro country.

On the first day out our companion (whom we called Victor) fell a victim to one of the many fevers lurking in those treacherous swamps. By the third day he had become so weak that he could do no work, so Morse and I carried on, paddling and poling so much extra cargo, trusting to luck and hoping more fervently than either of us would have cared to admit that Victor would recover and soon resume his share of the heavy up-river pull. Unfortunately for all concerned, the reverse was the case. At the end of a week he was unable to stand, and there seemed no prospect of his taking a turn for the better for some time.

So we tied up and sat down to discuss the situation. A decision was arrived at to which Victor gave his consent, an act which merits much respect. Had it not been for that fact, our action would have been un-

justifiable. For we put him aboard a raft, with his rifle and plenty of provisions, a few bananas, half a cooked monkey and some smoked fish, and pushed him off on what we reckoned would be a two to three-day journey to Barranca. We were not a little thankful to see the last of him as he slid out of sight, his raft whirling round in the eddies, his arms waving feebly. Under the circumstances the responsibility was not to be laughed at. Awkward questions are sometimes asked about the death of a partner in such an enterprise, more especially when he happens to have been a complete stranger to his companions a few days before the start of the expedition. We felt that it was not only our canoe off which a weight had been taken.

We had not been many more days on the march before the first faint traces of demoralization showed themselves. We were in a state of considerable physical fatigue, the flies were bothering us a good deal, and, though we never regretted our action for a moment, we could not help being oppressed by the thought of the Victor incident. Ahead of us lay three long months of toil before we could reach the Upper Cangaimi. However, it is of little use thinking twice at such times, so we plodded on in patience with our minds fixed on those teeming herds of cattle. There was little to interest us on the stretch of the Marañon, one day the monotony was broken, however, for we discovered the scattered bones of the Huambiza warriors who had been wounded in the sacking of Barranca and had died on the homeward march. The bodies had been buried, for the Jivaros never leave their honoured dead to be desecrated, but the forest ghouls had been at work.

Then one afternoon we turned up the Morona, each trying in vain to suppress the depression which the

other could not fail to note. We were poling along the shallows near shore as usual when something happened which was destined to play no small part in our lives. Indeed, in the light of after events, I have little hesitation in saying that our lives were *saved* by the most remarkable chance meeting which I have ever experienced.

One of us happened to look out toward midstream. In a moment we were standing rooted to the bottom of the canoe, staring in blank amazement at what we saw. In the act of landing on the point of a small island not a hundred yards away was a young Indian girl. It was evident that she had seen us approaching as she swam, for she clambered ashore, turned, and surveyed us calmly as we paddled slowly toward her. There she stood, serenity personified, apparently utterly alone and utterly unafraid—as unafraid of us two as of anything else the woods might hide.

It flashed into my mind that she could never be facing that cruel country alone and without one single solitary possession of any kind . . . there must be an ambush. We were being lured well within range of those thickets which grew ten yards behind that dispassionate siren.

I said as much to Morse.

But neither of us wanted to let slip a chance of obtaining help at that stage of the game. I think we should have welcomed a party of head-hunters on the warpath with open arms. A white man in the woods must ever make a friend of his wild brother if he has a mind to go far and see much. But there are times when alone he cannot stand at all. Up there in the dark places of the Amazon Nature is cruel, a monster which guards its secrets well and gives no quarter to intruders.

So we paddled quietly ahead, keeping as keen a

watch on the little island as we could. The girl did not move a muscle until we were within about twenty yards. Then she spoke, in the Quichua tongue.

"Mai manta chamungui?" (Where do you come from?), she called. And then:

"Mai man ringuichi?" (Where are you going?)

We told her we were from Barranca, bound for the Cangaimi.

By this time the nose of our dugout had grounded on the sand. Cautiously we landed on the tip of the island and inquired how many were in her party and to what tribe they belonged. We were scarcely prepared for the answer:

"I am alone, as you see me," she said.

The truth is seldom on the lips of the Jívaros, but there was a ring in that girl's voice, something about her straight, fearless gaze that inspired confidence. In a few moments we had forgotten all about any ambush.

Breginia—for so she was called—was an exceptionally intelligent Indian. Her physique, too, was, in normal times, even finer than that of most of her kinswomen. And above all, she had an extraordinarily commanding presence. She was about eighteen years old, tall, slim and strong, with small hands and feet. Her thick black hair fell to her waist. Her teeth were stained black, but had not been filed in accordance with Jívaro custom. Her skin was yellow-brown, her features a fine example of the best Mongol type.

On that day, however, she was clearly suffering from hunger and fatigue. In the emaciated condition in which we found her she must have weighed but 85 or 90 pounds as against a normal 110. She looked completely worn out. The first thing we did was to offer her food, which she attacked ravenously. After a little while she told us her astounding tale.

Many years previously a young priest, whose name I cannot recall, had made his way down the Pastaza, a tributary of the Marañon, which runs parallel with the Morona and immediately below it, and established a mission post among the Andoan Indians which he called Andoas. It was well-known in those parts as being the only settlement which could boast a church bell. (I once had the story of how that bell reached Andoas from a *cauchero* I met during my wanderings. He was the owner of the launch on which it was taken as far as a launch could go. Then it was transferred to a canoe. Finally it was borne by Indians to its destination. It may seem to have been a great waste of time and labour, but it certainly added not a little to the prestige of that ingenious Jesuit.)

At the time of which I write the priest was an old man, head of a flourishing centre of religion and farming. Now the girl Breginia came from somewhere near Andoas, and had become one of the old priest's most trusted and accomplished assistants. She had shown such a capacity for learning that he taught her the marriage and baptismal services, all in the Quicha dialect, and conferred on her certain powers whereby she could go among the semi-converted tribes and officiate at those ceremonies. Thus she grew to be looked upon with considerable awe and reverence for many miles round Andoas. Gradually she became aware of her strength and would visit more distant tribes of savages where even the priest himself dare not go. Wherever she went she gained the confidence of the Indians—people who in the ordinary way have no respect for women—by sheer force of character.

At length she came to the Záparos and took up her abode with them on the banks of the Morona. But there misfortune overtook her, for she was captured

by the Huambizas in a raid. The Huambizas were so situated that they were more or less forced to subsist by raiding their neighbours, hostile tribes which lived all round them. These tribes (one of them the Záparos) were themselves always raiding outlying posts such as Barranca and Borja, with the result that the Huambizas possessed themselves of much of the loot which had been taken from the *caucheros* by their enemies.

So Breginia was carried off to the Santiago to be the wife of a Huambiza warrior. She went submissively, knowing well enough that her head would be the price of resistance. But if she was to all appearances a contented captive like the rest, her will to conquer was unquenchable. Not many months had passed before she had her eagerly awaited chance of escape. She disappeared from the Santiago, having darted off into the interminable forests on her way to death or freedom, guided only by her directional instinct and *without one single thing* wherewith to feed or clothe herself. For several weeks she carried on, a hunted animal in the vastness of the woods, with death at the hands of Nature standing in her path ahead, death at the hands of her captors awaiting her if she went back. By day she hid herself, afraid of the keen eyes and ears of her own kind, by night she floated on a log or a ramshackle raft made by tying driftwood together with *bejuco,* until at last she was far from the Huambiza country. On she went, plunging through the forest, wading through marshes, swimming streams, crawling and climbing to find her food—turtles' and birds' eggs, frogs, grubs, wild fruit, roots, anything that river or forest might offer. But *Chulla-chaquicuna* and *Yacu-Mámam* were unkind. Day by day she grew thinner and thinner, weaker and weaker.

Breginia finished her story seated on the poop of our

canoe, her legs dangling over the side, contentedly munching a banana. She ended, as she had begun, with characteristic simplicity.

"And that is how we meet to-day," she said.

We soon fell to talking with the Indian girl of our expedition and of how we could be of mutual assistance to one another. It turned out that her intention was to follow up the Morona to a place where she knew that there were some old *chacras* of the Záparos, which might still have some plantains bearing fruit, and from there to strike across the watershed to the Pastaza and so on to Andoas, her home. As we were making in the same direction she willingly fell in with the proposal which we made that she should accompany us. We, too, were glad to have her, for her wonderful woodcraft would be of inestimable value, and as a third hand in the canoe she would, when she had recovered her strength, be no negligible quantity. From the first she had never shown a moment's fear, but by now she was unmistakably friendly.

We set off once more.

Breginia proved to be a linguist of no mean standing, for she knew all the dialects of the country through which we were to pass, besides *Quichua* in which she talked with us. She acted as lookout-man and steersman with a care and constancy which nothing could shake, leaving Ed. and myself free to paddle and pole.

But the most pressing problem which confronted us was that of supplementing our dwindling supply of foodstuffs with game. Here, too, Breginia was of very great value to us, for she excelled in the arts of tracking and hunting. Seated there in the stern, wet and happy, steering with a paddle and bailing, nothing escaped her keen eyes and ears. When monkeys were sighted she would turn in to the bank and I would dash off after

them into the dense woods and shoot as many as possible before they fled beyond rifle range. Then I would sit down and wait for Breginia to find me and the game which I had dropped. Soon she would come along with the monkeys slung over her shoulders, following me up as easily as if I had marked my trail with a machete. Thus, instead of getting one or two monkeys at most, and that with great difficulty, I was free to follow the troop up as hard as I could and take full advantage of every chance that presented itself. When she found me, Breginia would tell me to follow my own trail back to the canoe. But even my years of experience in the forests had not taught me to follow an unmarked single trail, and when I lost myself beyond all hope of recovery my guide would rock with laughter at the piteous spectacle.

Back again in the canoe she would once more put on the shirt we had given her and settle herself in the stern until it was time to call a halt.

One day we heard the cries of *maquisapas* not far from shore, but nothing would induce Breginia to enter the woods, for she said there was a jaguar about; it was the monkeys which told her so. I landed, but before I could get within range of the monkeys I sighted the great cat and shot him. Breginia then joined me and taking my machete she cut out the beast's heart and eye-teeth. The heart she roasted and ate, giving me a portion with the assurance that it would make me braver if I swallowed it. The teeth she kept, for they are valued highly as souvenirs of the chase by the Indians.

After the day's work, when we had built a fire and spread our blankets, Breginia would wander off round camp to look for signs of game, turtles' eggs, or anything else she might come across, and to search

for indications of hunting-parties. Invariably she would return with something of interest. Once she brought back half a dozen blue potatoes, very similar in appearance and taste to the common cultivated variety. In the woods they grow singly at the root of a long slender vine. This may have been the original tuber which was taken to the highlands of Peru by the Incas, cultivated, improved, and transported across the Atlantic to become the staple food of Ireland.

As we lay in our blankets under the stars and listened to the calls of the forest the Indian girl would teach us their true meaning. Her store of woodcraft was inexhaustible. She would tell us what animal or bird uttered some particular call and why, what it ate and how it caught its prey or found its food—a host of information which is hidden from all except those children of the wild places.

Thus we worked our way steadily up the Morona, creeping along its eternally winding course. But little by little the nature of the woods lining the banks of the Morona changed and we passed out of the game zone. Breginia, however, kept the larder supplied for some little time longer with wild honey, shoots of the wild cane very similar in appearance to asparagus, and copra. The fat white grub to be found under the shell of the cocoanuts subsisting on the white meat made better eating than the meat itself. But at last even the Indian girl's efforts began to be of little avail.

Then a second disaster overtook us. One of Morse's leg's which had been covered with water-ulcers for some time, finally became so swollen that he could not stand on it. The craters of the ulcers seemed to be but deep holes into which one could poke a match up to the head. The calf of his leg seemed dangerously infected, so we decided to camp out and try to do something for

him. I remember how I argued that possibly amputation would be the only means of saving his life.

At this point Breginia intervened and said she could cure him. She went to work. By the application of certain leaves, the identity of which I do not know, she had reduced his leg within a week to something like normal proportions, and soon afterwards the trouble disappeared entirely. There are medicines hidden in those forests which would make any man's fortune could they be but found and marketed.

We continued our march. But at length the inevitable happened, for one day as we were nearing the mouth of the Sicuanga, we ran out of food and patience. The mosquitoes and sand-flies were so thick that as Ed. and I sat with our heads swathed in netting, we could only see each other through a haze. Then I fell sick and became weaker each day, until I could scarcely lift a paddle. One day we quarrelled. I wanted to push ahead, and Morse wanted to go back. He claimed a half share in the canoe, and my offer to build him a raft was met with a solid refusal to give up his just claim. One hasty word led to another until I seized my rifle and told him that the only reason I didn't shoot him full of holes was that he was an American. He reached for his own weapon, and thereby ran a grave risk. I don't know to this day why I didn't pull the trigger at that moment. He answered that he would not hesitate to shoot me any more than he would "any other dog." And so we stood eyeing each other, until Morse broke the suspense by throwing down his rifle and declaring "what damned fools we were." The end of it was that we struck a compromise. We would put up the Sicuanga and collect what plantains and *yuca* there might be at my old camp where Supaitranca and I had planted them six months before.

Breginia had remained an impassive spectator of the quarrel.

The day before we reached the mouth of the Sicuanga, worried to death and half starved, sick and weary, the humour of the situation suddenly struck us, and we started to laugh.

Morse, I think, started the ball rolling by asking me "how I would like to make a living ferrying passengers up the Morona." Or perhaps it was the sight of his mosquito-net, which dangled in brown folds from his chin that set me off. He had been spitting tobacco juice through it for weeks, and it was a sorry sight.

How we started I cannot clearly remember, but I shall never forget how we laughed ourselves into a state of complete exhaustion. There is a story by Jack London about some marooned sailors who laughed until they died. It might appear to the casual reader to be far-fetched, but I remember how vividly it brought home to me my own experience when I read it, for that day on the Morona we were fast approaching madness.

To cut a long story short, I lasted for only about a fortnight up the Sicuanga. Morse did the only thing that could be done. He left me. Had he waited there for me to recover we should probably all have died of starvation. Had he attempted to take me along with him as deadweight cargo he would perhaps have been unable to reach the nearest supply of food of which we knew, my old camp which we estimated to be some eight or ten days further up-stream. With Breginia to help him he might possibly reach food and bring it back to me in time.

Once more our companion saved the day. For she not only helped to pole the heavy dugout up the Sicuanga but was able to find some old Záparo *chacras* of which she knew *before they had reached my plantation.*

(Whether the Záparos had actually been there when I was looking for them through all those wretched months I do not know, but such a thing is not by any means impossible.)

So Morse and Breginia landed me, built me a rough shelter, and set off. I was left with only a cupful of *farina* on which to live for the fifteen days or so which it would take them to reach my old camp and return. I was so weak that I could not stand. My rifle was lying by my side ready for the game which never seemed to come. Two or three days later, however, I heard a movement of the trees outside, and crawled out to see what was causing it. The monkeys which were playing in the branches above my shelter saved my life, for I was able to shoot one of them, crawl back into the shelter, light a fire and cook myself some food. For the rest of the time until Ed. and the girl returned I subsisted on that beast. Then, the day they got back, bringing with them some *yuca* and plantains, I made a discovery. In the bottom of my "war-bag" I found a box of Holloway's Vegetable Pills. Being about as ill as I could be, I did not think I could do myself any harm by swallowing that boxful. So I did. Within twenty-four hours I was on my feet for the first time for weeks, and in a day or two was able to do some work.

So there is nothing like Holloway's Pills and boiled monkey when you're in a really bad way.

When Morse and I met each other, each was astounded at the other's ghastly appearance. Hollow-eyed, skinny, and yellow, we stared at each other in horror. The fierce sun on the open river had kept the colour in our faces, and hidden the natural pallor which famine and disease bring on, but our real condition was revealed after three weeks in the shade.

By that time we had, perforce, abandoned all idea of reaching the Cangaimi, for the Záparo *chacra* did not produce enough food to carry us all that way. So with one accord we turned down-stream on what was to be my last journey in that forlorn, unconquerable land in which I had been destined to pass so many miserable days.

What was to become of Breginia? To take her down to Barranca or Iquitos with us meant slavery or worse for her. She, too, knew enough of the ways of the Amazon country to realize that. There was but one thing left. We must take her down to the point where the Sicuanga meets the Morona, give her what food and stores we could, and leave her to continue on her journey home. It was a hard struggle for her to decide, though, Indian fashion, she showed scarcely any emotion. She had passed through so much with us that she had become greatly attached to us. But reason prevailed, and she chose to face the two months' journey to Andoas with all its hardships and dangers. A child of the forests, in the forests she would stay.

When we reached the mouth of the Sicuanga she changed her plan. She would turn back up that stream and make for the Záparo *chacras* once more. From there she would try and follow the trails of those old friends of hers whom she expected to find somewhere on the watershed between the Morona and the Pastaza. The rest would be easy.

We gave her matches, a machete, a revolver, and a small kettle. The latter would serve to cook any eels, rays, frogs, etc., which she might capture, and to boil *chonta,* nuts, and other fruits.

She made a package of all these things except the machete, tying them in the shirt we had given her. Then she cut a strip of bark and hung her bundle from

her head. She stood ready to march, machete in hand, and turned to watch us go.

As we slipped round the first bend she stood motionless with one arm raised in farewell, a bronze statue against the green background, impassive, unafraid. We may have saved her life. She certainly saved ours.

CHAPTER XXV

THE END OF THE TRAIL

'A Cinch—I come to my senses—Consular intervention—Home.

FROM Iquitos Morse and I took a steamboat to Manaos. There I had to wait a week or two for the arrival of an ocean steamer to take me to New York, whither I was bound at last. The delay was nearly the cause of my downfall. I met a certain Mike Gilleran, who had left South Africa shortly after the disappearance of a gold shipment between Bulawayo and Johannesburg. He proposed to me that we should together go in for his old profession and hold up the Bank in Manaos where he knew a gold shipment lately arrived from England to be lying. "It was a pity to think of so much good money waiting for some foxy government official to appropriate it," he remarked. When downtown together one day, he asked me to wait while he had a look round. Presently he came out of the Bank, walked down the steps among the *thirty-odd soldiers of the guard,* took a look round, and pronounced it "a cinch." Finally, however, he gave up the project, because he could find nobody to help him.

Then it was that he proposed to me than we should go to Venezuela, where new diamond fields had just been found. We made all preparations to jump into canoes and make for the River Negro, whence we were to pass to the Orinoco, a matter of two thousand miles hard canoeing. Our provisions were all stowed, and the last item of my kit ready, when I received a letter from

home reminding me that it was about time that I put in an appearance. That letter brought me up to scratch, and I shipped on the first steamer. But before I sailed, I met my old friend, William Game, who had just returned from the head-waters of the Jurua suffering from berri-berri. He brought me news of Jack, who had gone off with him to that river on a rubber expedition with a few Indians.

The Indians robbed them of their canoe and deserted, shortly after which their rations gave out. They lived for a few weeks on what they could find in the forest and finally contracted berri-berri. Jack died of the dreaded disease. Game, who had not enough strength to lift him out of his hammock, much less bury him, walked out of camp, climbed on to a balsa log, and floated down to the first plantation, where he took a river-boat to Manaos. I never saw him after that. Morse it was who met him in New York months later. Then he disappeared, and in a few days Ed. received a note from him written in Buffalo. "I'm off to the Klondyke," he wrote, "be sure and write to me." I have never again heard of Game. No doubt he froze to death in the Arctic Circle.

On a hot day in August, not many years before the World War, while Morse was standing in the entrance of a Broadway hotel, his attention was attracted by a *maquisapa,* perched on the top of a two-wheeled street piano, grinding out fox-trots near the adjoining curb. A shabbily dressed individual, with a beseeching droop of the shoulders, was passing the hat around, with mumbled mutterings of wistful affability. Presently he stood before Morse. Ambusha! as sleek as ever in his new rôle. He tried to slink away but Morse persisted. He promised to visit him that night at the hotel. He never

returned. That is the last I ever heard of Charley Pope. He may now be one of the Rulers of Moscow.

When we called in at Pará, I went ashore and paid a visit to the United States Consul, Mr. K. K. Kenneday. When I told him who I was he collapsed.

"Your . . . name's . . . Up de Graff"? he spluttered, as he subsided into a more normal state.

And then the whole story came out—how he had been looking for me for years, while my mail accumulated in his office, and he himself became more and more convinced of my having died a violent death.

Collecting my letters, and thanking him for his trouble, I hurried off to catch my boat. I found later that not only he, but also his predecessor had been on my tracks. The latter, Mr. George G. Matthews, had written to my mother the two letters which I append.

U. S. Consulate,
Pará, Brazil,
March 23rd, /97.

Mrs. Ella A. Up de Graff,
My dear Madam:

Your favor just to hand. In reply I will say that I will do all in my power for your son when he arrives in Pará. I have received instructions from State Department regarding him. Hoping that he may reach Parà soon,

I am, respectfully,
Geo. G. Mathews, Jr.,
U. S. Consul.

United States Consulate,
Pará, Brazil
March 3rd, 1898.

Mrs. Ella A. Up de Graff,
My dear Madam:

Your letter came to hand this afternoon. I regret exceedingly that you have never received the letters sent by your son. I certainly cannot explain why they never reached you. I have made enquiries with everyone with whom I have come in

contact about your son, and have found only one who claimed to have heard of him; that was Major J. O. Kerbey, who came across the country last October, and claimed that he heard of him up in the rubber district. I have requested Mr. Carlos Morailey, who knows everyone up there, to make enquiries for me, and hope to have some positive information soon.

I remain, madam, yours very truly,

Geo. G. Mathews, Jr.,
U. S. Consul.

As I sailed away from Pará, I tried to analyze the strange motive which had kept me for so many of the best years of my life in such places as I have described. To this day I have found no solution to the riddle, unless it be that I have inherited some of the spirit of my great-great-grandfather, one of the old sea-captains, who kept his flag flying in the days of the pirates.

My boat arrived in New York on Nov. 18th, 1901, seven years to a day since I sailed in the *S.S. Advance* for South America.

Of all the letters which I found on my arrival home, I have selected two with which to close this history. They came from the points where I started and finished my travels in the Amazon country.

Under the date March 27th, 1898, Mr. Tillman, the United States Minister at Quito, who was then on holiday in Tennessee, wrote to my mother:

My dear Madam:

I had not intended your letter to remain so long unanswered, but it had been misplaced ,and I have been very busy. I am glad to know you have heard from your son, and hope he may return to you. You, of course, know his handwriting, and that the letter was really from him, but does the date bear no evidence of having been changed? It seems strange that you received the letters from the Consul at Pará, and none from Fritz. I cannot answer your question about the motives which induced him to go so far, and into such a country, and remain so long.

Very truly yours,

H. D. Tillman.

The other communication is from Mr. Kenneday of Pará. I will quote it almost *in extenso*:

Consulate of the United States of America,
Pará, Brazil, Nov. 21, 1898.

Sir:

Your letter under date of the 31st ultimo, asking aid in locating the whereabouts of your son F. W. Up de Graff is at hand, together with photo, and contents thereof carefully noted. . . . .

I deeply sympathize with you in hours of distress, and you may rest assured that I shall not leave a stone unturned in my efforts to find some trace, if possible, of your son. . . . .

In the event that he is, or has at any time been up the Amazon, I believe that I have access to means of tracing him without prolonged delay.

I am greatly impressed with your appeals, and will earnestly enlist to serve so worthy a cause.

Most sincerely,

K. K. Kenneday,
U. S. Consul.

The italics are mine. The joke is Mr. Kenneday's.

Piranha - 67-68